

Reference (Lecture and Patch)	Object	Canvas Location	Object and Arguments
lec01_1.04\tuesday-example.pd	*~	#X obj 173 275	*~ 0.1;
lec01_1.04\tuesday-example.pd	*~	#X obj 176 146	*~ 30;
lec01_1.04\tuesday-example.pd	+~	#X obj 176 175	+~ 440;
lec01_1.04\tuesday-example.pd	bng	#X obj 81 374	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec01_1.04\tuesday-example.pd	dac~	#X obj 174 328	dac~;
lec01_1.04\tuesday-example.pd	osc~	#X obj 175 234	osc~;
lec01_1.04\tuesday-example.pd	osc~	#X obj 176 116	osc~ 3;
lec01_1.04\tuesday-example.pd	print~	#X obj 80 414	print~;
lec02_1.06\1.objectstoday.pd	*~	#X obj 29 151	*~;
lec02_1.06\1.objectstoday.pd	+~	#X obj 25 117	+~;
lec02_1.06\1.objectstoday.pd	bng	#X obj 34 263	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec02_1.06\1.objectstoday.pd	clip~	#X obj 318 364	clip~;
lec02_1.06\1.objectstoday.pd	dac~	#X obj 31 192	dac~;
lec02_1.06\1.objectstoday.pd	osc~	#X obj 31 83	osc~;
lec02_1.06\1.objectstoday.pd	print	#X obj 319 299	print;
lec02_1.06\1.objectstoday.pd	print~	#X obj 31 227	print~;
lec02_1.06\1.objectstoday.pd	tabwrite~	#X obj 319 334	tabwrite~;
lec02_1.06\2.array.pd	*~	#X obj 124 131	*~ 0.1;
lec02_1.06\2.array.pd	bng	#X obj 130 236	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec02_1.06\2.array.pd	bng	#X obj 216 228	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec02_1.06\2.array.pd	dac~	#X obj 67 264	dac~;
lec02_1.06\2.array.pd	osc~	#X obj 124 104	osc~ 440;
lec02_1.06\2.array.pd	print~	#X obj 131 265	print~;
lec02_1.06\2.array.pd	tabwrite~	#X obj 218 268	tabwrite~ array2;
lec02_1.06\3.signalrange.pd	*~	#X obj 97 235	*~ 0.1;
lec02_1.06\3.signalrange.pd	bng	#X obj 217 226	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144

lec02_1.06\3.signalrange.pd	clip~	#X obj 109 160	clip~ -1 1;
lec02_1.06\3.signalrange.pd	dac~	#X obj 96 271	dac~;
lec02_1.06\3.signalrange.pd	osc~	#X obj 132 88	osc~ 440;
lec02_1.06\3.signalrange.pd	osc~	#X obj 22 88	osc~ 550;
lec02_1.06\3.signalrange.pd	osc~	#X obj 230 87	osc~;
lec02_1.06\3.signalrange.pd	osc~	#X obj 288 89	osc~;
lec02_1.06\3.signalrange.pd	tabwrite~	#X obj 218 256	tabwrite~ array3;
lec02_1.06\4.ampfrequency.pd	*~	#X obj 103 138	*~;
lec02_1.06\4.ampfrequency.pd	+~	#X obj 155 225	+~;
lec02_1.06\4.ampfrequency.pd	bng	#X obj 233 245	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec02_1.06\4.ampfrequency.pd	bng	#X obj 65 244	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec02_1.06\4.ampfrequency.pd	clip~	#X obj 119 183	clip~ -1 1;
lec02_1.06\4.ampfrequency.pd	dac~	#X obj 159 273	dac~;
lec02_1.06\4.ampfrequency.pd	osc~	#X obj 102 104	osc~;
lec02_1.06\4.ampfrequency.pd	print	#X obj 175 99	print;
lec02_1.06\4.ampfrequency.pd	print~	#X obj 57 280	print~;
lec02_1.06\4.ampfrequency.pd	tabwrite~	#X obj 234 271	tabwrite~ array4;
lec02_1.06\5.moreampfreq.pd	*~	#X obj 44 152	*~;
lec02_1.06\5.moreampfreq.pd	*~	#X obj 50 196	*~;
lec02_1.06\5.moreampfreq.pd	*~	#X obj 274 137	*~;
lec02_1.06\5.moreampfreq.pd	*~	#X obj 286 230	*~;
lec02_1.06\5.moreampfreq.pd	+~	#X obj 157 353	+~;
lec02_1.06\5.moreampfreq.pd	+~	#X obj 281 166	+~;
lec02_1.06\5.moreampfreq.pd	bng	#X obj 257 355	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec02_1.06\5.moreampfreq.pd	bng	#X obj 73 371	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec02_1.06\5.moreampfreq.pd	clip~	#X obj 151 324	clip~ -1 1;
lec02_1.06\5.moreampfreq.pd	dac~	#X obj 161 401	dac~;
lec02_1.06\5.moreampfreq.pd	osc~	#X obj 43 107	osc~;
lec02_1.06\5.moreampfreq.pd	osc~	#X obj 107 163	osc~;

lec02_1.06\5.moreampfreq.pd	osc~	#X obj 273 108	osc~;
lec02_1.06\5.moreampfreq.pd	osc~	#X obj 282 200	osc~;
lec02_1.06\5.moreampfreq.pd	print~	#X obj 69 406	print~;
lec02_1.06\5.moreampfreq.pd	tabwrite~	#X obj 237 399	tabwrite~ array5;
lec03_1.11\1.new.objects.pd	delay	#X obj 52 60	delay;
lec03_1.11\1.new.objects.pd	line~	#X obj 51 116	line~;
lec03_1.11\1.new.objects.pd	metro	#X obj 51 89	metro;
lec03_1.11\2.oscillator.pd	*~	#X obj 84 103	*~;
lec03_1.11\2.oscillator.pd	*~	#X obj 21 195	*~ 0.01;
lec03_1.11\2.oscillator.pd	bng	#X obj 160 153	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec03_1.11\2.oscillator.pd	clip~	#X obj 22 170	clip~ -10 10;
lec03_1.11\2.oscillator.pd	dac~	#X obj 71 231	dac~;
lec03_1.11\2.oscillator.pd	osc~	#X obj 162 101	osc~;
lec03_1.11\2.oscillator.pd	osc~	#X obj 83 73	osc~;
lec03_1.11\2.oscillator.pd	tabwrite~	#X obj 114 236	tabwrite~ seeme;
lec03_1.11\3.phase.pd	*~	#X obj 81 99	*~;
lec03_1.11\3.phase.pd	*~	#X obj 37 178	*~ 0.05;
lec03_1.11\3.phase.pd	bng	#X obj 199 31	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec03_1.11\3.phase.pd	bng	#X obj 238 81	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec03_1.11\3.phase.pd	clip~	#X obj 38 153	clip~ -2 2;
lec03_1.11\3.phase.pd	dac~	#X obj 38 206	dac~;
lec03_1.11\3.phase.pd	delay	#X obj 200 54	delay 2000;
lec03_1.11\3.phase.pd	osc~	#X obj 83 73	osc~;
lec03_1.11\3.phase.pd	osc~	#X obj 149 80	osc~;
lec03_1.11\3.phase.pd	tabwrite~	#X obj 114 236	tabwrite~ seeme2;
lec03_1.11\4.dumb.sequence.pd	*~	#X obj 104 326	*~ 0.01;
lec03_1.11\4.dumb.sequence.pd	*~	#X obj 104 279	*~ 5;
lec03_1.11\4.dumb.sequence.pd	bng	#X obj 40 66	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec03_1.11\4.dumb.sequence.pd	bng	#X obj 314 69	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1

lec03_1.11\4.dumb.sequence.pd	bng	#X obj 313 93	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec03_1.11\4.dumb.sequence.pd	bng	#X obj 312 118	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec03_1.11\4.dumb.sequence.pd	bng	#X obj 310 142	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec03_1.11\4.dumb.sequence.pd	bng	#X obj 309 172	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec03_1.11\4.dumb.sequence.pd	bng	#X obj 58 117	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec03_1.11\4.dumb.sequence.pd	clip~	#X obj 105 301	clip~ -10 10;
lec03_1.11\4.dumb.sequence.pd	dac~	#X obj 103 354	dac~;
lec03_1.11\4.dumb.sequence.pd	delay	#X obj 219 50	delay 150;
lec03_1.11\4.dumb.sequence.pd	delay	#X obj 220 73	delay 150;
lec03_1.11\4.dumb.sequence.pd	delay	#X obj 218 96	delay 150;
lec03_1.11\4.dumb.sequence.pd	delay	#X obj 217 121	delay 150;
lec03_1.11\4.dumb.sequence.pd	delay	#X obj 216 146	delay 150;
lec03_1.11\4.dumb.sequence.pd	delay	#X obj 40 92	delay 150;
lec03_1.11\4.dumb.sequence.pd	osc~	#X obj 106 254	osc~;
lec03_1.11\5.metro.pd	*~	#X obj 57 311	*~ 0.05;
lec03_1.11\5.metro.pd	clip~	#X obj 58 286	clip~ -2 2;
lec03_1.11\5.metro.pd	dac~	#X obj 61 344	dac~;
lec03_1.11\5.metro.pd	metro	#X obj 64 155	metro 100;
lec03_1.11\5.metro.pd	metro	#X obj 167 156	metro 161.8;
lec03_1.11\5.metro.pd	osc~	#X obj 59 250	osc~;
lec03_1.11\6.line.pd	*~	#X obj 20 160	*~;
lec03_1.11\6.line.pd	*~	#X obj 15 262	*~ 0.05;
lec03_1.11\6.line.pd	bng	#X obj 191 49	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec03_1.11\6.line.pd	bng	#X obj 277 66	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec03_1.11\6.line.pd	clip~	#X obj 16 237	clip~ -2 2;
lec03_1.11\6.line.pd	dac~	#X obj 15 295	dac~;
lec03_1.11\6.line.pd	delay	#X obj 191 88	delay 400;
lec03_1.11\6.line.pd	delay	#X obj 278 91	delay 400;
lec03_1.11\6.line.pd	line~	#X obj 80 166	line~;

lec03_1.11\6.line.pd	osc~	#X obj 20 134	osc~ 440;
lec03_1.11\6.line.pd	tabwrite~	#X obj 108 303	tabwrite~ seeme2;
lec04_1.13\1.pitchamp.pd	*~	#X obj 41 255	*~;
lec04_1.13\1.pitchamp.pd	*~	#X obj 41 283	*~ 0.1;
lec04_1.13\1.pitchamp.pd	bng	#X obj 227 128	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec04_1.13\1.pitchamp.pd	bng	#X obj 233 294	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec04_1.13\1.pitchamp.pd	dac~	#X obj 41 315	dac~;
lec04_1.13\1.pitchamp.pd	delay	#X obj 235 159	delay 100;
lec04_1.13\1.pitchamp.pd	delay	#X obj 241 186	delay 500;
lec04_1.13\1.pitchamp.pd	line~	#X obj 95 243	line~;
lec04_1.13\1.pitchamp.pd	line~	#X obj 41 125	line~;
lec04_1.13\1.pitchamp.pd	osc~	#X obj 40 152	osc~;
lec04_1.13\1.pitchamp.pd	tabwrite~	#X obj 227 325	tabwrite~ x1-13;
lec04_1.13\2.fmgain.pd	*~	#X obj 38 301	*~;
lec04_1.13\2.fmgain.pd	*~	#X obj 38 329	*~ 0.1;
lec04_1.13\2.fmgain.pd	*~	#X obj 37 134	*~;
lec04_1.13\2.fmgain.pd	+~	#X obj 37 165	+~ 440;
lec04_1.13\2.fmgain.pd	bng	#X obj 247 349	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec04_1.13\2.fmgain.pd	dac~	#X obj 33 368	dac~;
lec04_1.13\2.fmgain.pd	line~	#X obj 158 274	line~;
lec04_1.13\2.fmgain.pd	line~	#X obj 200 134	line~;
lec04_1.13\2.fmgain.pd	osc~	#X obj 38 193	osc~;
lec04_1.13\2.fmgain.pd	osc~	#X obj 36 100	osc~;
lec04_1.13\2.fmgain.pd	tabwrite~	#X obj 248 384	tabwrite~ x1-13b;
lec05_1.18\1.new-objects.pd	cos~	#X obj 88 129	cos~;
lec05_1.18\1.new-objects.pd	dbtorms	#X obj 89 239	dbtorms;
lec05_1.18\1.new-objects.pd	ftom	#X obj 89 209	ftom;
lec05_1.18\1.new-objects.pd	mtof	#X obj 89 180	mtof;
lec05_1.18\1.new-objects.pd	phasor~	#X obj 88 96	phasor~;

lec05_1.18\1.new-objects.pd	rmstodb	#X obj 90 267	rmstodb;
lec05_1.18\1.new-objects.pd	tabread~	#X obj 89 156	tabread~;
lec05_1.18\2.review-lines-and-delay.pd	*~	#X obj 116 279	*~;
lec05_1.18\2.review-lines-and-delay.pd	bng	#X obj 50 68	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec05_1.18\2.review-lines-and-delay.pd	bng	#X obj 110 123	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec05_1.18\2.review-lines-and-delay.pd	bng	#X obj 190 123	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec05_1.18\2.review-lines-and-delay.pd	bng	#X obj 257 123	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec05_1.18\2.review-lines-and-delay.pd	bng	#X obj 334 122	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec05_1.18\2.review-lines-and-delay.pd	bng	#X obj 418 128	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec05_1.18\2.review-lines-and-delay.pd	dac~	#X obj 118 309	dac~;
lec05_1.18\2.review-lines-and-delay.pd	del	#X obj 102 93	del 500;
lec05_1.18\2.review-lines-and-delay.pd	del	#X obj 183 94	del 1000;
lec05_1.18\2.review-lines-and-delay.pd	del	#X obj 257 93	del 2000;
lec05_1.18\2.review-lines-and-delay.pd	del	#X obj 336 94	del 3000;
lec05_1.18\2.review-lines-and-delay.pd	del	#X obj 421 92	del 3500;
lec05_1.18\2.review-lines-and-delay.pd	line~	#X obj 156 280	line~;
lec05_1.18\2.review-lines-and-delay.pd	line~	#X obj 113 229	line~;
lec05_1.18\2.review-lines-and-delay.pd	osc~	#X obj 114 253	osc~;
lec05_1.18\3.tables.pd	*~	#X obj 101 259	*~;
lec05_1.18\3.tables.pd	*~	#X obj 98 164	*~ 1000;
lec05_1.18\3.tables.pd	/	#X obj 324 317	/ 1000;
lec05_1.18\3.tables.pd	bng	#X obj 324 263	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec05_1.18\3.tables.pd	dac~	#X obj 102 288	dac~;
lec05_1.18\3.tables.pd	line~	#X obj 157 268	line~;
lec05_1.18\3.tables.pd	osc~	#X obj 323 345	osc~;
lec05_1.18\3.tables.pd	phasor~	#X obj 98 139	phasor~;
lec05_1.18\3.tables.pd	tabread~	#X obj 98 189	tabread~ tab.lec05_1.18a;
lec05_1.18\3.tables.pd	tabwrite~	#X obj 268 379	tabwrite~ tab.lec05_1.18a;
lec05_1.18\4.moretables.pd	*~	#X obj 139 240	*~;

lec05_1.18\4.moretables.pd	*~	#X obj 136 145	*~ 1000;
lec05_1.18\4.moretables.pd	*~	#X obj 107 201	*~;
lec05_1.18\4.moretables.pd	dac~	#X obj 140 269	dac~;
lec05_1.18\4.moretables.pd	line~	#X obj 207 231	line~;
lec05_1.18\4.moretables.pd	line~	#X obj 137 96	line~;
lec05_1.18\4.moretables.pd	osc~	#X obj 59 172	osc~ 440;
lec05_1.18\4.moretables.pd	phasor~	#X obj 136 120	phasor~;
lec05_1.18\4.moretables.pd	tabread~	#X obj 136 169	tabread~ tab.lec05_1.18a;
lec05_1.18\5.table-pitch.pd	*~	#X obj 50 265	*~;
lec05_1.18\5.table-pitch.pd	*~	#X obj 50 143	*~;
lec05_1.18\5.table-pitch.pd	+~	#X obj 50 174	+~;
lec05_1.18\5.table-pitch.pd	bng	#X obj 128 385	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec05_1.18\5.table-pitch.pd	dac~	#X obj 51 294	dac~;
lec05_1.18\5.table-pitch.pd	line~	#X obj 148 300	line~;
lec05_1.18\5.table-pitch.pd	line~	#X obj 48 83	line~;
lec05_1.18\5.table-pitch.pd	osc~	#X obj 49 232	osc~;
lec05_1.18\5.table-pitch.pd	phasor~	#X obj 49 112	phasor~;
lec05_1.18\5.table-pitch.pd	tabread~	#X obj 50 202	tabread~ tab.lec05_1.18d;
lec05_1.18\5.table-pitch.pd	tabwrite~	#X obj 63 416	tabwrite~ tab.lec05_1.18d;
lec05_1.18\6.units.pd	*~	#X obj 137 274	*~;
lec05_1.18\6.units.pd	+	#X obj 153 125	+ 4;
lec05_1.18\6.units.pd	+	#X obj 216 127	+ 7;
lec05_1.18\6.units.pd	dac~	#X obj 138 303	dac~;
lec05_1.18\6.units.pd	dbtorms	#X obj 510 90	dbtorms;
lec05_1.18\6.units.pd	dbtorms	#X obj 252 249	dbtorms;
lec05_1.18\6.units.pd	ftom	#X obj 436 90	ftom;
lec05_1.18\6.units.pd	line~	#X obj 254 342	line~;
lec05_1.18\6.units.pd	mtof	#X obj 66 156	mtof;
lec05_1.18\6.units.pd	mtof	#X obj 156 156	mtof;

lec05_1.18\6.units.pd	mtof	#X obj 217 158	mtof;
lec05_1.18\6.units.pd	mtof	#X obj 437 140	mtof;
lec05_1.18\6.units.pd	osc~	#X obj 99 242	osc~;
lec05_1.18\6.units.pd	osc~	#X obj 141 241	osc~;
lec05_1.18\6.units.pd	osc~	#X obj 182 242	osc~;
lec05_1.18\6.units.pd	rmstodb	#X obj 510 138	rmstodb;
lec06_1.20\1.new-objects.pd	pack	#X obj 34 51	pack;
lec06_1.20\1.new-objects.pd	r	#X obj 123 144	r;
lec06_1.20\1.new-objects.pd	receive	#X obj 33 143	receive;
lec06_1.20\1.new-objects.pd	s	#X obj 122 115	s;
lec06_1.20\1.new-objects.pd	send	#X obj 33 116	send;
lec06_1.20\1.new-objects.pd	t	#X obj 121 171	t;
lec06_1.20\1.new-objects.pd	trigger	#X obj 32 170	trigger;
lec06_1.20\1.new-objects.pd	unpack	#X obj 33 84	unpack;
lec06_1.20\2.table-pitch-again.pd	*~	#X obj 23 308	*~;
lec06_1.20\2.table-pitch-again.pd	*~	#X obj 23 178	*~;
lec06_1.20\2.table-pitch-again.pd	+~	#X obj 23 207	+~;
lec06_1.20\2.table-pitch-again.pd	bng	#X obj 270 454	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec06_1.20\2.table-pitch-again.pd	bng	#X obj 341 125	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec06_1.20\2.table-pitch-again.pd	dac~	#X obj 24 337	dac~;
lec06_1.20\2.table-pitch-again.pd	line~	#X obj 65 316	line~;
lec06_1.20\2.table-pitch-again.pd	line~	#X obj 23 120	line~;
lec06_1.20\2.table-pitch-again.pd	osc~	#X obj 22 266	osc~;
lec06_1.20\2.table-pitch-again.pd	phasor~	#X obj 24 149	phasor~;
lec06_1.20\2.table-pitch-again.pd	send	#X obj 232 406	send tab.lec06_1.20a;
lec06_1.20\2.table-pitch-again.pd	tabread~	#X obj 22 237	tabread~ tab.lec06_1.20a;
lec06_1.20\2.table-pitch-again.pd	tabwrite	#X obj 273 242	tabwrite tab.lec06_1.20a;
lec06_1.20\2.table-pitch-again.pd	tabwrite~	#X obj 234 479	tabwrite~ tab.lec06_1.20a;
lec06_1.20\3.send-receive-etc.pd	pack	#X obj 27 83	pack;

lec06_1.20\3.send-receive-etc.pd	pack	#X obj 32 215	pack 0 4;
lec06_1.20\3.send-receive-etc.pd	print	#X obj 28 113	print;
lec06_1.20\3.send-receive-etc.pd	print	#X obj 46 305	print z;
lec06_1.20\3.send-receive-etc.pd	receive	#X obj 361 308	receive dog;
lec06_1.20\3.send-receive-etc.pd	send	#X obj 354 253	send dog;
lec06_1.20\3.send-receive-etc.pd	tabwrite	#X obj 30 335	tabwrite tab.lec06_1.20b;
lec06_1.20\3.send-receive-etc.pd	unpack	#X obj 89 246	unpack 0 0;
lec06_1.20\4.table-pitch-again2.pd	*	#X obj 185 496	*;
lec06_1.20\4.table-pitch-again2.pd	*	#X obj 27 476	*;
lec06_1.20\4.table-pitch-again2.pd	*~	#X obj 40 349	*~;
lec06_1.20\4.table-pitch-again2.pd	*~	#X obj 41 90	*~;
lec06_1.20\4.table-pitch-again2.pd	+~	#X obj 41 119	+~;
lec06_1.20\4.table-pitch-again2.pd	dac~	#X obj 41 378	dac~;
lec06_1.20\4.table-pitch-again2.pd	dbtorms	#X obj 59 250	dbtorms;
lec06_1.20\4.table-pitch-again2.pd	line~	#X obj 58 321	line~;
lec06_1.20\4.table-pitch-again2.pd	line~	#X obj 41 32	line~;
lec06_1.20\4.table-pitch-again2.pd	mtof	#X obj 156 75	mtof;
lec06_1.20\4.table-pitch-again2.pd	mtof	#X obj 223 75	mtof;
lec06_1.20\4.table-pitch-again2.pd	mtof	#X obj 294 77	mtof;
lec06_1.20\4.table-pitch-again2.pd	mtof	#X obj 363 78	mtof;
lec06_1.20\4.table-pitch-again2.pd	mtof	#X obj 434 77	mtof;
lec06_1.20\4.table-pitch-again2.pd	osc~	#X obj 40 178	osc~;
lec06_1.20\4.table-pitch-again2.pd	pack	#X obj 58 296	pack 0 50;
lec06_1.20\4.table-pitch-again2.pd	pack	#X obj 156 102	pack 0 0;
lec06_1.20\4.table-pitch-again2.pd	pack	#X obj 223 103	pack 0 1;
lec06_1.20\4.table-pitch-again2.pd	pack	#X obj 294 104	pack 0 2;
lec06_1.20\4.table-pitch-again2.pd	pack	#X obj 363 105	pack 0 3;
lec06_1.20\4.table-pitch-again2.pd	pack	#X obj 433 105	pack 0 4;
lec06_1.20\4.table-pitch-again2.pd	pack	#X obj 332 505	pack 550 0;

lec06_1.20\4.table-pitch-again2.pd	phasor~	#X obj 42 61	phasor~;
lec06_1.20\4.table-pitch-again2.pd	send	#X obj 422 406	send tab.lec06_1.20a;
lec06_1.20\4.table-pitch-again2.pd	t	#X obj 332 458	t b f;
lec06_1.20\4.table-pitch-again2.pd	tabread~	#X obj 40 149	tabread~ tab.lec06_1.20a;
lec06_1.20\4.table-pitch-again2.pd	tabwrite	#X obj 279 223	tabwrite tab.lec06_1.20a;
lec06_1.20\4.table-pitch-again2.pd	tabwrite	#X obj 333 530	tabwrite tab.lec06_1.20a;
lec06_1.20\4.table-pitch-again2.pd	trigger	#X obj 73 467	trigger float float;
lec07_1.25\1.new-objects.pd	float	#X obj 70 233	float;
lec07_1.25\1.new-objects.pd	loadbang	#X obj 71 93	loadbang;
lec07_1.25\1.new-objects.pd	mod	#X obj 69 204	mod;
lec07_1.25\1.new-objects.pd	soundfiler	#X obj 70 132	soundfiler;
lec07_1.25\1.new-objects.pd	tabread4~	#X obj 70 172	tabread4~;
lec07_1.25\1.new-objects.pd	tgl	#X obj 68 265	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec07_1.25\2.loops.pd	*~	#X obj 192 45	*~ 5;
lec07_1.25\2.loops.pd	+	#X obj 91 139	+ 1;
lec07_1.25\2.loops.pd	bng	#X obj 55 172	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec07_1.25\2.loops.pd	bng	#X obj 19 106	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec07_1.25\2.loops.pd	float	#X obj 21 137	float;
lec07_1.25\2.loops.pd	metro	#X obj 22 59	metro 200;
lec07_1.25\2.loops.pd	mod	#X obj 91 161	mod 5;
lec07_1.25\2.loops.pd	mod	#X obj 98 57	mod 5;
lec07_1.25\2.loops.pd	phasor~	#X obj 191 17	phasor~ 1;
lec07_1.25\2.loops.pd	tabread	#X obj 20 194	tabread tlec07_1.25a;
lec07_1.25\2.loops.pd	tabread~	#X obj 192 69	tabread~ tlec07_1.25a;
lec07_1.25\2.loops.pd	tgl	#X obj 22 38	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0 -1
lec07_1.25\3.sampling1.pd	*	#X obj 224 178	* 100;
lec07_1.25\3.sampling1.pd	*	#X obj 223 198	* 100;
lec07_1.25\3.sampling1.pd	*~	#X obj 36 250	*~ 0.1;
lec07_1.25\3.sampling1.pd	*~	#X obj 339 274	*~ 0.3;

lec07_1.25\3.sampling1.pd	*~	#X obj 455 286	*~ 0.1;
lec07_1.25\3.sampling1.pd	*~	#X obj 188 250	*~ 0.1;
lec07_1.25\3.sampling1.pd	*~	#X obj 196 175	*~;
lec07_1.25\3.sampling1.pd	+~	#X obj 196 197	+~;
lec07_1.25\3.sampling1.pd	bng	#X obj 316 295	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec07_1.25\3.sampling1.pd	dac~	#X obj 36 272	dac~;
lec07_1.25\3.sampling1.pd	dac~	#X obj 456 308	dac~;
lec07_1.25\3.sampling1.pd	dac~	#X obj 188 272	dac~;
lec07_1.25\3.sampling1.pd	line~	#X obj 37 201	line~;
lec07_1.25\3.sampling1.pd	line~	#X obj 456 239	line~;
lec07_1.25\3.sampling1.pd	loadbang	#X obj 27 14	loadbang;
lec07_1.25\3.sampling1.pd	osc~	#X obj 340 252	osc~ 1000;
lec07_1.25\3.sampling1.pd	phasor~	#X obj 196 153	phasor~;
lec07_1.25\3.sampling1.pd	soundfiler	#X obj 27 59	soundfiler;
lec07_1.25\3.sampling1.pd	tabread~	#X obj 456 262	tabread~ tlec07_1.25b;
lec07_1.25\3.sampling1.pd	tabread4~	#X obj 37 224	tabread4~ tlec07_1.25b;
lec07_1.25\3.sampling1.pd	tabread4~	#X obj 189 224	tabread4~ tlec07_1.25b;
lec07_1.25\3.sampling1.pd	tabwrite~	#X obj 341 294	tabwrite~ tlec07_1.25b;
lec07_1.25\4.by-the-way.pd	send	#X obj 166 90	send tlec07_1.25b;
lec07_1.25\4.by-the-way.pd	soundfiler	#X obj 183 38	soundfiler;
lec08_1.27\1.new-objects.pd	adc~	#X obj 28 46	adc~;
lec08_1.27\1.new-objects.pd	hip~	#X obj 27 79	hip~;
lec08_1.27\2.sampling2.pd	*	#X obj 31 77	* 100;
lec08_1.27\2.sampling2.pd	*~	#X obj 27 407	*~ 0.3;
lec08_1.27\2.sampling2.pd	+	#X obj 27 170	+ 1000;
lec08_1.27\2.sampling2.pd	adc~	#X obj 286 340	adc~ 1;
lec08_1.27\2.sampling2.pd	bng	#X obj 296 395	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec08_1.27\2.sampling2.pd	dac~	#X obj 27 437	dac~;
lec08_1.27\2.sampling2.pd	hip~	#X obj 286 367	hip~ 3;

lec08_1.27\2.sampling2.pd	line~	#X obj 28 358	line~;
lec08_1.27\2.sampling2.pd	loadbang	#X obj 470 348	loadbang;
lec08_1.27\2.sampling2.pd	pack	#X obj 26 196	pack 0 22.68;
lec08_1.27\2.sampling2.pd	print	#X obj 38 228	print;
lec08_1.27\2.sampling2.pd	soundfiler	#X obj 469 422	soundfiler;
lec08_1.27\2.sampling2.pd	tabread4~	#X obj 28 381	tabread4~ tlec08_1.27a;
lec08_1.27\2.sampling2.pd	tabwrite~	#X obj 286 423	tabwrite~ tlec08_1.27a;
lec08_1.27\2.sampling2.pd	trigger	#X obj 31 102	trigger float float;
lec08_1.27\3.sampling.transpose.pd	*	#X obj 33 193	* 100000;
lec08_1.27\3.sampling.transpose.pd	*~	#X obj 76 390	*~ 0.3;
lec08_1.27\3.sampling.transpose.pd	*~	#X obj 375 380	*~ 0.3;
lec08_1.27\3.sampling.transpose.pd	/	#X obj 31 171	/ 261.626;
lec08_1.27\3.sampling.transpose.pd	adc~	#X obj 233 353	adc~ 1;
lec08_1.27\3.sampling.transpose.pd	bng	#X obj 214 420	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec08_1.27\3.sampling.transpose.pd	bng	#X obj 296 383	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec08_1.27\3.sampling.transpose.pd	bng	#X obj 387 404	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec08_1.27\3.sampling.transpose.pd	dac~	#X obj 76 412	dac~;
lec08_1.27\3.sampling.transpose.pd	hip~	#X obj 234 376	hip~ 3;
lec08_1.27\3.sampling.transpose.pd	hip~	#X obj 77 358	hip~ 3;
lec08_1.27\3.sampling.transpose.pd	line~	#X obj 77 314	line~;
lec08_1.27\3.sampling.transpose.pd	loadbang	#X obj 499 357	loadbang;
lec08_1.27\3.sampling.transpose.pd	metro	#X obj 33 80	metro 500;
lec08_1.27\3.sampling.transpose.pd	mtof	#X obj 33 130	mtof;
lec08_1.27\3.sampling.transpose.pd	osc~	#X obj 376 358	osc~ 1000;
lec08_1.27\3.sampling.transpose.pd	pack	#X obj 29 262	pack 0 2268;
lec08_1.27\3.sampling.transpose.pd	print~	#X obj 258 406	print~;
lec08_1.27\3.sampling.transpose.pd	soundfiler	#X obj 502 421	soundfiler;
lec08_1.27\3.sampling.transpose.pd	tabread4~	#X obj 77 337	tabread4~ tlec08_1.27b;
lec08_1.27\3.sampling.transpose.pd	tabwrite~	#X obj 236 440	tabwrite~ tlec08_1.27a;

lec08_1.27\3.sampling.transpose.pd	tabwrite~	#X obj 376 425	tabwrite~ tlec08_1.27a;
lec08_1.27\3.sampling.transpose.pd	tgl	#X obj 33 60	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0 1
lec08_1.27\3.sampling.transpose.pd	trigger	#X obj 29 219	trigger float bang;
lec08_1.27\4.sampling.envelope.pd	*	#X obj 45 133	* 100000;
lec08_1.27\4.sampling.envelope.pd	*~	#X obj 349 339	*~ 0.3;
lec08_1.27\4.sampling.envelope.pd	*~	#X obj 39 412	*~ 0.3;
lec08_1.27\4.sampling.envelope.pd	*~	#X obj 40 356	*~;
lec08_1.27\4.sampling.envelope.pd	/	#X obj 43 111	/ 261.626;
lec08_1.27\4.sampling.envelope.pd	bng	#X obj 326 360	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec08_1.27\4.sampling.envelope.pd	dac~	#X obj 39 434	dac~;
lec08_1.27\4.sampling.envelope.pd	del	#X obj 223 283	del 100;
lec08_1.27\4.sampling.envelope.pd	del	#X obj 45 190	del 5;
lec08_1.27\4.sampling.envelope.pd	float	#X obj 44 213	float;
lec08_1.27\4.sampling.envelope.pd	hip~	#X obj 40 380	hip~ 3;
lec08_1.27\4.sampling.envelope.pd	line~	#X obj 40 311	line~;
lec08_1.27\4.sampling.envelope.pd	line~	#X obj 164 339	line~;
lec08_1.27\4.sampling.envelope.pd	loadbang	#X obj 472 286	loadbang;
lec08_1.27\4.sampling.envelope.pd	metro	#X obj 45 27	metro 500;
lec08_1.27\4.sampling.envelope.pd	mtof	#X obj 45 70	mtof;
lec08_1.27\4.sampling.envelope.pd	osc~	#X obj 350 317	osc~ 1000;
lec08_1.27\4.sampling.envelope.pd	pack	#X obj 41 285	pack 0 2268;
lec08_1.27\4.sampling.envelope.pd	soundfiler	#X obj 477 353	soundfiler;
lec08_1.27\4.sampling.envelope.pd	tabread4~	#X obj 41 334	tabread4~ tlec08_1.27c;
lec08_1.27\4.sampling.envelope.pd	tabwrite~	#X obj 351 359	tabwrite~ tlec08_1.27c;
lec08_1.27\4.sampling.envelope.pd	tgl	#X obj 45 7	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0 1
lec08_1.27\4.sampling.envelope.pd	trigger	#X obj 43 237	trigger float bang;
lec08_1.27\4.sampling.envelope.pd	trigger	#X obj 45 153	trigger bang float bang;
lec09_2.01\1.new-objects.pd	expr	#X obj 29 228	expr;
lec09_2.01\1.new-objects.pd	inlet	#X obj 31 84	inlet;

lec09_2.01\1.new-objects.pd	max~	#X obj 29 324	max~;
lec09_2.01\1.new-objects.pd	min~	#X obj 29 293	min~;
lec09_2.01\1.new-objects.pd	poly	#X obj 29 199	poly;
lec09_2.01\1.new-objects.pd	route	#X obj 32 117	route;
lec09_2.01\1.new-objects.pd	wrap~	#X obj 29 261	wrap~;
lec09_2.01\2.phasor-sampler.pd	*	#X obj 77 106	* 100;
lec09_2.01\2.phasor-sampler.pd	*	#X obj 76 127	* 100;
lec09_2.01\2.phasor-sampler.pd	*	#X obj 66 412	* 100;
lec09_2.01\2.phasor-sampler.pd	*	#X obj 65 433	* 100;
lec09_2.01\2.phasor-sampler.pd	*~	#X obj 30 106	*~;
lec09_2.01\2.phasor-sampler.pd	*~	#X obj 29 209	*~ 0.3;
lec09_2.01\2.phasor-sampler.pd	*~	#X obj 29 184	*~;
lec09_2.01\2.phasor-sampler.pd	*~	#X obj 28 580	*~ 0.3;
lec09_2.01\2.phasor-sampler.pd	*~	#X obj 28 551	*~;
lec09_2.01\2.phasor-sampler.pd	*~	#X obj 30 509	*~;
lec09_2.01\2.phasor-sampler.pd	*~	#X obj 235 444	*~ -0.5;
lec09_2.01\2.phasor-sampler.pd	*~	#X obj 32 411	*~;
lec09_2.01\2.phasor-sampler.pd	+~	#X obj 30 129	+~;
lec09_2.01\2.phasor-sampler.pd	+~	#X obj 236 475	+~ 0.5;
lec09_2.01\2.phasor-sampler.pd	+~	#X obj 32 434	+~;
lec09_2.01\2.phasor-sampler.pd	bng	#X obj 303 564	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec09_2.01\2.phasor-sampler.pd	cos~	#X obj 234 415	cos~;
lec09_2.01\2.phasor-sampler.pd	dac~	#X obj 29 237	dac~;
lec09_2.01\2.phasor-sampler.pd	dac~	#X obj 28 612	dac~;
lec09_2.01\2.phasor-sampler.pd	line~	#X obj 62 184	line~;
lec09_2.01\2.phasor-sampler.pd	line~	#X obj 100 595	line~;
lec09_2.01\2.phasor-sampler.pd	loadbang	#X obj 26 -321	loadbang;
lec09_2.01\2.phasor-sampler.pd	pack	#X obj 113 204	pack 0 50;
lec09_2.01\2.phasor-sampler.pd	pack	#X obj 100 570	pack 0 50;

lec09_2.01\2.phasor-sampler.pd	phasor~	#X obj 31 83	phasor~;
lec09_2.01\2.phasor-sampler.pd	phasor~	#X obj 126 365	phasor~;
lec09_2.01\2.phasor-sampler.pd	soundfiler	#X obj 31 -254	soundfiler;
lec09_2.01\2.phasor-sampler.pd	tabread4~	#X obj 32 458	tabread4~ tlec09_2.01a;
lec09_2.01\2.phasor-sampler.pd	tabread4~	#X obj 30 153	tabread4~ tlec09_2.01a;
lec09_2.01\2.phasor-sampler.pd	tabwrite~	#X obj 305 635	tabwrite~ scope;
lec09_2.01\2.phasor-sampler.pd	tabwrite~	#X obj 308 602	tabwrite~ scope2;
lec09_2.01\2.phasor-sampler.pd	tgl	#X obj 113 185	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec09_2.01\2.phasor-sampler.pd	tgl	#X obj 100 550	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec09_2.01\3.poly-sampler.pd	loadbang	#X obj 20 104	loadbang;
lec09_2.01\3.poly-sampler.pd	sampler-voice	#X obj 53 167	sampler-voice;
lec09_2.01\3.poly-sampler.pd	sampler-voice	#X obj 52 217	sampler-voice;
lec09_2.01\3.poly-sampler.pd	sampler-voice	#X obj 54 240	sampler-voice;
lec09_2.01\3.poly-sampler.pd	soundfiler	#X obj 25 171	soundfiler;
lec09_2.01\4.poly-sampler-duration.pd	+	#X obj 117 276	+ 1;
lec09_2.01\4.poly-sampler-duration.pd	f	#X obj 77 278	f;
lec09_2.01\4.poly-sampler-duration.pd	loadbang	#X obj 263 222	loadbang;
lec09_2.01\4.poly-sampler-duration.pd	mod	#X obj 117 296	mod 8;
lec09_2.01\4.poly-sampler-duration.pd	pack	#X obj 134 325	pack 0 0 0;
lec09_2.01\4.poly-sampler-duration.pd	pack	#X obj 102 169	pack 0 1000;
lec09_2.01\4.poly-sampler-duration.pd	print	#X obj 30 358	print;
lec09_2.01\4.poly-sampler-duration.pd	route	#X obj 83 358	route 0 1 2 3 4 5 6 7;
lec09_2.01\4.poly-sampler-duration.pd	sampler-voice-with-duration	#X obj 191 390	sampler-voice-with-duration;
lec09_2.01\4.poly-sampler-duration.pd	sampler-voice-with-duration	#X obj 85 543	sampler-voice-with-duration;
lec09_2.01\4.poly-sampler-duration.pd	sampler-voice-with-duration	#X obj 100 518	sampler-voice-with-duration;
lec09_2.01\4.poly-sampler-duration.pd	sampler-voice-with-duration	#X obj 112 496	sampler-voice-with-duration;

lec09_2.01\4.poly-sampler-duration.pd	sampler-voice-with-duration	#X obj 124 473	sampler-voice-with-duration;
lec09_2.01\4.poly-sampler-duration.pd	sampler-voice-with-duration	#X obj 146 452	sampler-voice-with-duration;
lec09_2.01\4.poly-sampler-duration.pd	sampler-voice-with-duration	#X obj 175 410	sampler-voice-with-duration;
lec09_2.01\4.poly-sampler-duration.pd	sampler-voice-with-duration	#X obj 159 430	sampler-voice-with-duration;
lec09_2.01\4.poly-sampler-duration.pd	soundfiler	#X obj 262 274	soundfiler;
lec09_2.01\4.poly-sampler-duration.pd	t	#X obj 102 215	t b f;
lec09_2.01\4.poly-sampler-duration.pd	unpack	#X obj 101 191	unpack;
lec09_2.01\sampler-voice.pd	*	#X obj 45 133	* 100000;
lec09_2.01\sampler-voice.pd	*~	#X obj 39 412	*~ 0.3;
lec09_2.01\sampler-voice.pd	*~	#X obj 40 356	*~;
lec09_2.01\sampler-voice.pd	/	#X obj 43 111	/ 261.626;
lec09_2.01\sampler-voice.pd	dac~	#X obj 39 434	dac~;
lec09_2.01\sampler-voice.pd	del	#X obj 223 283	del 100;
lec09_2.01\sampler-voice.pd	del	#X obj 45 190	del 5;
lec09_2.01\sampler-voice.pd	float	#X obj 44 213	float;
lec09_2.01\sampler-voice.pd	hip~	#X obj 40 380	hip~ 3;
lec09_2.01\sampler-voice.pd	inlet	#X obj 45 28	inlet;
lec09_2.01\sampler-voice.pd	line~	#X obj 40 311	line~;
lec09_2.01\sampler-voice.pd	line~	#X obj 164 339	line~;
lec09_2.01\sampler-voice.pd	mtof	#X obj 45 70	mtof;
lec09_2.01\sampler-voice.pd	pack	#X obj 41 285	pack 0 2268;
lec09_2.01\sampler-voice.pd	tabread4~	#X obj 41 334	tabread4~ tlec09_2.01b;
lec09_2.01\sampler-voice.pd	trigger	#X obj 43 237	trigger float bang;
lec09_2.01\sampler-voice.pd	trigger	#X obj 45 153	trigger bang float bang;
lec09_2.01\sampler-voice-with-duration.pd	*	#X obj 44 144	* 100000;
lec09_2.01\sampler-voice-with-duration.pd	*~	#X obj 39 412	*~ 0.3;

lec09_2.01\sampler-voice-with-duration.pd	*~	#X obj 40 356	*~;
lec09_2.01\sampler-voice-with-duration.pd	/	#X obj 42 122	/ 261.626;
lec09_2.01\sampler-voice-with-duration.pd	dac~	#X obj 39 434	dac~;
lec09_2.01\sampler-voice-with-duration.pd	del	#X obj 45 190	del 5;
lec09_2.01\sampler-voice-with-duration.pd	del	#X obj 223 283	del;
lec09_2.01\sampler-voice-with-duration.pd	float	#X obj 44 213	float;
lec09_2.01\sampler-voice-with-duration.pd	hip~	#X obj 40 380	hip~ 3;
lec09_2.01\sampler-voice-with-duration.pd	inlet	#X obj 42 17	inlet;
lec09_2.01\sampler-voice-with-duration.pd	line~	#X obj 40 311	line~;
lec09_2.01\sampler-voice-with-duration.pd	line~	#X obj 164 339	line~;
lec09_2.01\sampler-voice-with-duration.pd	mtof	#X obj 44 81	mtof;
lec09_2.01\sampler-voice-with-duration.pd	pack	#X obj 41 285	pack 0 2268;
lec09_2.01\sampler-voice-with-duration.pd	tabread4~	#X obj 41 334	tabread4~ tlec09_2.01c;
lec09_2.01\sampler-voice-with-duration.pd	trigger	#X obj 43 237	trigger float bang;
lec09_2.01\sampler-voice-with-duration.pd	trigger	#X obj 44 164	trigger bang float bang;
lec09_2.01\sampler-voice-with-duration.pd	unpack	#X obj 42 39	unpack;
lec10_2.03\1.new-objects.pd	catch~	#X obj 85 147	catch~;
lec10_2.03\1.new-objects.pd	output~	#X obj 87 51	output~;
lec10_2.03\1.new-objects.pd	throw~	#X obj 85 118	throw~;
lec10_2.03\2.phasor-sampler-again.pd	*	#X obj 45 263	* 441;
lec10_2.03\2.phasor-sampler-again.pd	*	#X obj 44 284	* 441;
lec10_2.03\2.phasor-sampler-again.pd	*~	#X obj 7 431	*~ 0.3;
lec10_2.03\2.phasor-sampler-again.pd	*~	#X obj 7 402	*~;
lec10_2.03\2.phasor-sampler-again.pd	*~	#X obj 9 360	*~;
lec10_2.03\2.phasor-sampler-again.pd	*~	#X obj 209 301	*~ -0.5;
lec10_2.03\2.phasor-sampler-again.pd	*~	#X obj 11 262	*~;
lec10_2.03\2.phasor-sampler-again.pd	*~	#X obj 245 -289	*~ 0.2;
lec10_2.03\2.phasor-sampler-again.pd	/	#X obj 190 238	/;
lec10_2.03\2.phasor-sampler-again.pd	+~	#X obj 209 325	+~ 0.5;

lec10_2.03\2.phasor-sampler-again.pd	+~	#X obj 11 285	+~;
lec10_2.03\2.phasor-sampler-again.pd	bng	#X obj 255 373	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec10_2.03\2.phasor-sampler-again.pd	bng	#X obj 223 -279	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec10_2.03\2.phasor-sampler-again.pd	cos~	#X obj 208 276	cos~;
lec10_2.03\2.phasor-sampler-again.pd	dac~	#X obj 7 463	dac~;
lec10_2.03\2.phasor-sampler-again.pd	line~	#X obj 79 446	line~;
lec10_2.03\2.phasor-sampler-again.pd	loadbang	#X obj 14 -313	loadbang;
lec10_2.03\2.phasor-sampler-again.pd	mtof	#X obj 106 134	mtof;
lec10_2.03\2.phasor-sampler-again.pd	osc~	#X obj 245 -313	osc~ 110;
lec10_2.03\2.phasor-sampler-again.pd	pack	#X obj 79 421	pack 0 50;
lec10_2.03\2.phasor-sampler-again.pd	phasor~	#X obj 105 216	phasor~;
lec10_2.03\2.phasor-sampler-again.pd	soundfiler	#X obj 14 -266	soundfiler;
lec10_2.03\2.phasor-sampler-again.pd	t	#X obj 176 190	t b f;
lec10_2.03\2.phasor-sampler-again.pd	tabread4~	#X obj 13 310	tabread4~ tlec10_2.03a;
lec10_2.03\2.phasor-sampler-again.pd	tabwrite~	#X obj 257 444	tabwrite~ scope;
lec10_2.03\2.phasor-sampler-again.pd	tabwrite~	#X obj 260 411	tabwrite~ scope2;
lec10_2.03\2.phasor-sampler-again.pd	tabwrite~	#X obj 247 -265	tabwrite~ tlec10_2.03a;
lec10_2.03\2.phasor-sampler-again.pd	tgl	#X obj 78 401	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec10_2.03\output~.pd	*~	#X obj 64 242	*~;
lec10_2.03\output~.pd	*~	#X obj 154 241	*~;
lec10_2.03\output~.pd	bng	#X obj 350 240	bng 15 250 50 0 empty empty mute -38 7 0 12 -262144
lec10_2.03\output~.pd	dac~	#X obj 64 272	dac~;
lec10_2.03\output~.pd	dbtorms	#X obj 29 97	dbtorms;
lec10_2.03\output~.pd	f	#X obj 353 437	f;
lec10_2.03\output~.pd	f	#X obj 353 515	f;
lec10_2.03\output~.pd	hip~	#X obj 85 192	hip~ 3;
lec10_2.03\output~.pd	hip~	#X obj 147 192	hip~ 3;
lec10_2.03\output~.pd	inlet~	#X obj 85 170	inlet~;
lec10_2.03\output~.pd	inlet~	#X obj 148 170	inlet~;

lec10_2.03\output~.pd	line~	#X obj 29 170	line~;
lec10_2.03\output~.pd	moses	#X obj 353 467	moses 1;
lec10_2.03\output~.pd	moses	#X obj 433 447	moses 1;
lec10_2.03\output~.pd	pack	#X obj 29 127	pack 0 50;
lec10_2.03\output~.pd	r	#X obj 323 174	r \\${0-master-lvl};
lec10_2.03\output~.pd	r	#X obj 29 71	r \\${0-master-out};
lec10_2.03\output~.pd	r	#X obj 433 418	r \\${0-master-out};
lec10_2.03\output~.pd	s	#X obj 353 541	s \\${0-master-lvl};
lec10_2.03\output~.pd	s	#X obj 323 279	s \\${0-master-out};
lec10_2.03\output~.pd	t	#X obj 353 490	t b;
lec10_2.03\output~.pd	t	#X obj 467 486	t b f;
lec11_2.08\1.new-objects.pd	catch~	#X obj 25 91	catch~;
lec11_2.08\1.new-objects.pd	inlet~	#X obj 27 187	inlet~;
lec11_2.08\1.new-objects.pd	moses	#X obj 28 255	moses;
lec11_2.08\1.new-objects.pd	outlet~	#X obj 26 212	outlet~;
lec11_2.08\1.new-objects.pd	random	#X obj 22 287	random;
lec11_2.08\1.new-objects.pd	receive~	#X obj 25 149	receive~;
lec11_2.08\1.new-objects.pd	send~	#X obj 25 120	send~;
lec11_2.08\1.new-objects.pd	throw~	#X obj 25 62	throw~;
lec11_2.08\2.inlets-and-outlets.pd	inlet	#X obj 299 59	inlet;
lec11_2.08\2.inlets-and-outlets.pd	inlet	#X obj 88 51	inlet;
lec11_2.08\2.inlets-and-outlets.pd	inlet	#X obj 152 50	inlet;
lec11_2.08\2.inlets-and-outlets.pd	inlet	#X obj -53 58	inlet;
lec11_2.08\2.inlets-and-outlets.pd	inlet	#X obj 11 57	inlet;
lec11_2.08\2.inlets-and-outlets.pd	inlet~	#X obj 220 59	inlet~;
lec11_2.08\2.inlets-and-outlets.pd	osc~	#X obj 58 119	osc~ 440;
lec11_2.08\2.inlets-and-outlets.pd	outlet	#X obj 312 148	outlet;
lec11_2.08\2.inlets-and-outlets.pd	outlet	#X obj 105 133	outlet;
lec11_2.08\2.inlets-and-outlets.pd	outlet	#X obj 169 132	outlet;

lec11_2.08\2.inlets-and-outlets.pd	outlet	#X obj -36 140	outlet;
lec11_2.08\2.inlets-and-outlets.pd	outlet	#X obj 28 139	outlet;
lec11_2.08\2.inlets-and-outlets.pd	outlet~	#X obj 222 138	outlet~;
lec11_2.08\2.inlets-and-outlets.pd	output~	#X obj 50 218	output~;
lec11_2.08\3.random.pd	/	#X obj 364 216	/ 100;
lec11_2.08\3.random.pd	+	#X obj 62 204	+ 60;
lec11_2.08\3.random.pd	+	#X obj 363 249	+ 60;
lec11_2.08\3.random.pd	metro	#X obj 62 142	metro 150;
lec11_2.08\3.random.pd	metro	#X obj 366 155	metro 150;
lec11_2.08\3.random.pd	mtof	#X obj 62 232	mtof;
lec11_2.08\3.random.pd	mtof	#X obj 363 277	mtof;
lec11_2.08\3.random.pd	osc~	#X obj 62 260	osc~;
lec11_2.08\3.random.pd	osc~	#X obj 363 305	osc~;
lec11_2.08\3.random.pd	output~	#X obj 62 288	output~;
lec11_2.08\3.random.pd	output~	#X obj 363 333	output~;
lec11_2.08\3.random.pd	random	#X obj 62 173	random 8;
lec11_2.08\3.random.pd	random	#X obj 367 185	random 800;
lec11_2.08\3.random.pd	tgl	#X obj 62 116	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec11_2.08\3.random.pd	tgl	#X obj 363 129	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec11_2.08\4.ring.modulatio.pd	*~	#X obj 360 219	*~;
lec11_2.08\4.ring.modulatio.pd	*~	#X obj 13 289	*~;
lec11_2.08\4.ring.modulatio.pd	adc~	#X obj 360 187	adc~;
lec11_2.08\4.ring.modulatio.pd	clip~	#X obj 13 121	clip~ -0.2 0.7;
lec11_2.08\4.ring.modulatio.pd	osc~	#X obj 406 217	osc~;
lec11_2.08\4.ring.modulatio.pd	osc~	#X obj 31 260	osc~;
lec11_2.08\4.ring.modulatio.pd	osc~	#X obj 14 92	osc~;
lec11_2.08\4.ring.modulatio.pd	output~	#X obj 363 254	output~;
lec11_2.08\4.ring.modulatio.pd	output~	#X obj 11 322	output~;
lec11_2.08\4.ring.modulatio.pd	output~	#X obj 30 162	output~;

lec11_2.08\output~.pd	*~	#X obj 64 242	*~;
lec11_2.08\output~.pd	*~	#X obj 154 241	*~;
lec11_2.08\output~.pd	bng	#X obj 350 240	bng 15 250 50 0 empty empty mute -38 7 0 12 -262144
lec11_2.08\output~.pd	dac~	#X obj 64 272	dac~;
lec11_2.08\output~.pd	dbtorms	#X obj 29 97	dbtorms;
lec11_2.08\output~.pd	f	#X obj 353 437	f;
lec11_2.08\output~.pd	f	#X obj 353 515	f;
lec11_2.08\output~.pd	hip~	#X obj 85 192	hip~ 3;
lec11_2.08\output~.pd	hip~	#X obj 147 192	hip~ 3;
lec11_2.08\output~.pd	inlet~	#X obj 85 170	inlet~;
lec11_2.08\output~.pd	inlet~	#X obj 148 170	inlet~;
lec11_2.08\output~.pd	line~	#X obj 29 170	line~;
lec11_2.08\output~.pd	moses	#X obj 353 467	moses 1;
lec11_2.08\output~.pd	moses	#X obj 433 447	moses 1;
lec11_2.08\output~.pd	pack	#X obj 29 127	pack 0 50;
lec11_2.08\output~.pd	r	#X obj 323 174	r \\${0}-master-lvl;
lec11_2.08\output~.pd	r	#X obj 29 71	r \\${0}-master-out;
lec11_2.08\output~.pd	r	#X obj 433 418	r \\${0}-master-out;
lec11_2.08\output~.pd	s	#X obj 353 541	s \\${0}-master-lvl;
lec11_2.08\output~.pd	s	#X obj 323 279	s \\${0}-master-out;
lec11_2.08\output~.pd	t	#X obj 353 490	t b;
lec11_2.08\output~.pd	t	#X obj 467 486	t b f;
lec12_2.10\1.new-objects.pd	exp	#X obj 56 78	exp;
lec12_2.10\1.new-objects.pd	exp~	#X obj 91 77	exp~;
lec12_2.10\1.new-objects.pd	expr	#X obj 58 151	expr \$f1;
lec12_2.10\1.new-objects.pd	expr~	#X obj 60 176	expr~ \$v1;
lec12_2.10\1.new-objects.pd	log	#X obj 56 103	log;
lec12_2.10\1.new-objects.pd	log~	#X obj 91 104	log~;
lec12_2.10\2.waveshaping.pd	*~	#X obj 160 302	*~;

lec12_2.10\2.waveshaping.pd	bng	#X obj 28 386	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec12_2.10\2.waveshaping.pd	bng	#X obj 164 399	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec12_2.10\2.waveshaping.pd	clip~	#X obj 24 234	clip~;
lec12_2.10\2.waveshaping.pd	osc~	#X obj 178 279	osc~;
lec12_2.10\2.waveshaping.pd	osc~	#X obj 22 155	osc~;
lec12_2.10\2.waveshaping.pd	output~	#X obj 167 338	output~;
lec12_2.10\2.waveshaping.pd	output~	#X obj 35 311	output~;
lec12_2.10\2.waveshaping.pd	output~	#X obj 88 134	output~;
lec12_2.10\2.waveshaping.pd	tabwrite~	#X obj 16 416	tabwrite~ tlec12_2.10;
lec12_2.10\2.waveshaping.pd	tabwrite~	#X obj 153 423	tabwrite~ tlec12_2.10;
lec12_2.10\output~.pd	*~	#X obj 64 242	*~;
lec12_2.10\output~.pd	*~	#X obj 154 241	*~;
lec12_2.10\output~.pd	bng	#X obj 350 240	bng 15 250 50 0 empty empty mute -38 7 0 12 -262144
lec12_2.10\output~.pd	dac~	#X obj 64 272	dac~;
lec12_2.10\output~.pd	dbtorms	#X obj 29 97	dbtorms;
lec12_2.10\output~.pd	f	#X obj 353 437	f;
lec12_2.10\output~.pd	f	#X obj 353 515	f;
lec12_2.10\output~.pd	hip~	#X obj 85 192	hip~ 3;
lec12_2.10\output~.pd	hip~	#X obj 147 192	hip~ 3;
lec12_2.10\output~.pd	inlet~	#X obj 85 170	inlet~;
lec12_2.10\output~.pd	inlet~	#X obj 148 170	inlet~;
lec12_2.10\output~.pd	line~	#X obj 29 170	line~;
lec12_2.10\output~.pd	moses	#X obj 353 467	moses 1;
lec12_2.10\output~.pd	moses	#X obj 433 447	moses 1;
lec12_2.10\output~.pd	pack	#X obj 29 127	pack 0 50;
lec12_2.10\output~.pd	r	#X obj 323 174	r \\${0}-master-lvl;
lec12_2.10\output~.pd	r	#X obj 29 71	r \\${0}-master-out;
lec12_2.10\output~.pd	r	#X obj 433 418	r \\${0}-master-out;
lec12_2.10\output~.pd	s	#X obj 353 541	s \\${0}-master-lvl;

lec12_2.10\output~.pd	s	#X obj 323 279	s \\${0}-master-out;
lec12_2.10\output~.pd	t	#X obj 353 490	t b;
lec12_2.10\output~.pd	t	#X obj 467 486	t b f;
lec13_2.15\1.waveshaping.pd	*~	#X obj 13 212	*~;
lec13_2.15\1.waveshaping.pd	*~	#X obj 16 268	*~;
lec13_2.15\1.waveshaping.pd	*~	#X obj 55 268	*~;
lec13_2.15\1.waveshaping.pd	*~	#X obj 95 267	*~;
lec13_2.15\1.waveshaping.pd	*~	#X obj 134 267	*~;
lec13_2.15\1.waveshaping.pd	*~	#X obj 174 266	*~;
lec13_2.15\1.waveshaping.pd	*~	#X obj 213 266	*~;
lec13_2.15\1.waveshaping.pd	/	#X obj 199 147	/ 100;
lec13_2.15\1.waveshaping.pd	+~	#X obj 12 114	+~;
lec13_2.15\1.waveshaping.pd	bng	#X obj 295 277	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec13_2.15\1.waveshaping.pd	clip~	#X obj 438 264	clip~;
lec13_2.15\1.waveshaping.pd	line~	#X obj 197 196	line~;
lec13_2.15\1.waveshaping.pd	osc~	#X obj 12 90	osc~;
lec13_2.15\1.waveshaping.pd	osc~	#X obj 67 87	osc~;
lec13_2.15\1.waveshaping.pd	output~	#X obj 294 385	output~;
lec13_2.15\1.waveshaping.pd	output~	#X obj 438 291	output~;
lec13_2.15\1.waveshaping.pd	output~	#X obj 26 144	output~;
lec13_2.15\1.waveshaping.pd	output~	#X obj 77 386	output~;
lec13_2.15\1.waveshaping.pd	output~	#X obj 5 386	output~;
lec13_2.15\1.waveshaping.pd	output~	#X obj 218 386	output~;
lec13_2.15\1.waveshaping.pd	output~	#X obj 146 386	output~;
lec13_2.15\1.waveshaping.pd	output~	#X obj 365 385	output~;
lec13_2.15\1.waveshaping.pd	pack	#X obj 199 172	pack 0 30;
lec13_2.15\1.waveshaping.pd	tabwrite~	#X obj 294 301	tabwrite~ tlec12_2.10;
lec13_2.15\2.sinusoid-shaper.pd	*~	#X obj 12 162	*~;
lec13_2.15\2.sinusoid-shaper.pd	/	#X obj 49 112	/ 100;

lec13_2.15\2.sinusoid-shaper.pd	/	#X obj 48 209	/ 100;
lec13_2.15\2.sinusoid-shaper.pd	+~	#X obj 11 259	+~;
lec13_2.15\2.sinusoid-shaper.pd	bng	#X obj 31 386	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec13_2.15\2.sinusoid-shaper.pd	cos~	#X obj 12 287	cos~;
lec13_2.15\2.sinusoid-shaper.pd	line~	#X obj 49 161	line~;
lec13_2.15\2.sinusoid-shaper.pd	line~	#X obj 48 260	line~;
lec13_2.15\2.sinusoid-shaper.pd	osc~	#X obj 12 82	osc~;
lec13_2.15\2.sinusoid-shaper.pd	output~	#X obj 31 326	output~;
lec13_2.15\2.sinusoid-shaper.pd	pack	#X obj 49 136	pack 0 30;
lec13_2.15\2.sinusoid-shaper.pd	pack	#X obj 48 234	pack 0 30;
lec13_2.15\2.sinusoid-shaper.pd	tabwrite~	#X obj 11 410	tabwrite~ tlec12_2.10b;
lec13_2.15\output~.pd	*~	#X obj 64 242	*~;
lec13_2.15\output~.pd	*~	#X obj 154 241	*~;
lec13_2.15\output~.pd	bng	#X obj 350 240	bng 15 250 50 0 empty empty mute -38 7 0 12 -262144
lec13_2.15\output~.pd	dac~	#X obj 64 272	dac~;
lec13_2.15\output~.pd	dbtorms	#X obj 29 97	dbtorms;
lec13_2.15\output~.pd	f	#X obj 353 437	f;
lec13_2.15\output~.pd	f	#X obj 353 515	f;
lec13_2.15\output~.pd	hip~	#X obj 85 192	hip~ 3;
lec13_2.15\output~.pd	hip~	#X obj 147 192	hip~ 3;
lec13_2.15\output~.pd	inlet~	#X obj 85 170	inlet~;
lec13_2.15\output~.pd	inlet~	#X obj 148 170	inlet~;
lec13_2.15\output~.pd	line~	#X obj 29 170	line~;
lec13_2.15\output~.pd	moses	#X obj 353 467	moses 1;
lec13_2.15\output~.pd	moses	#X obj 433 447	moses 1;
lec13_2.15\output~.pd	pack	#X obj 29 127	pack 0 50;
lec13_2.15\output~.pd	r	#X obj 323 174	r \\${0}-master-lvl;
lec13_2.15\output~.pd	r	#X obj 29 71	r \\${0}-master-out;
lec13_2.15\output~.pd	r	#X obj 433 418	r \\${0}-master-out;

lec13_2.15\output~.pd	s	#X obj 353 541	s \\${0-master-lvl};
lec13_2.15\output~.pd	s	#X obj 323 279	s \\${0-master-out};
lec13_2.15\output~.pd	t	#X obj 353 490	t b;
lec13_2.15\output~.pd	t	#X obj 467 486	t b f;
lec14_2.17\1.sinusoid-shaper-cont.pd	*~	#X obj 12 162	*~;
lec14_2.17\1.sinusoid-shaper-cont.pd	/	#X obj 49 112	/ 100;
lec14_2.17\1.sinusoid-shaper-cont.pd	/	#X obj 48 209	/ 100;
lec14_2.17\1.sinusoid-shaper-cont.pd	+~	#X obj 11 259	+~;
lec14_2.17\1.sinusoid-shaper-cont.pd	bng	#X obj 31 386	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec14_2.17\1.sinusoid-shaper-cont.pd	cos~	#X obj 12 287	cos~;
lec14_2.17\1.sinusoid-shaper-cont.pd	line~	#X obj 49 161	line~;
lec14_2.17\1.sinusoid-shaper-cont.pd	line~	#X obj 48 260	line~;
lec14_2.17\1.sinusoid-shaper-cont.pd	osc~	#X obj 12 82	osc~;
lec14_2.17\1.sinusoid-shaper-cont.pd	output~	#X obj 31 326	output~;
lec14_2.17\1.sinusoid-shaper-cont.pd	pack	#X obj 49 136	pack 0 30;
lec14_2.17\1.sinusoid-shaper-cont.pd	pack	#X obj 48 234	pack 0 30;
lec14_2.17\1.sinusoid-shaper-cont.pd	tabwrite~	#X obj 11 410	tabwrite~ tlec12_2.10b;
lec14_2.17\2.FM.pd	*~	#X obj -810 247	*~;
lec14_2.17\2.FM.pd	*~	#X obj -397 265	*~;
lec14_2.17\2.FM.pd	*~	#X obj -810 328	*~;
lec14_2.17\2.FM.pd	/	#X obj -773 201	/ 100;
lec14_2.17\2.FM.pd	/	#X obj -364 220	/ 100;
lec14_2.17\2.FM.pd	+~	#X obj -396 341	+~;
lec14_2.17\2.FM.pd	bng	#X obj -369 508	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec14_2.17\2.FM.pd	cos~	#X obj -810 278	cos~;
lec14_2.17\2.FM.pd	cos~	#X obj -397 364	cos~;
lec14_2.17\2.FM.pd	line~	#X obj -773 248	line~;
lec14_2.17\2.FM.pd	line~	#X obj -364 267	line~;
lec14_2.17\2.FM.pd	metro	#X obj -370 485	metro 250;

lec14_2.17\2.FM.pd	osc~	#X obj -809 155	osc~;
lec14_2.17\2.FM.pd	osc~	#X obj -396 164	osc~;
lec14_2.17\2.FM.pd	osc~	#X obj -772 324	osc~;
lec14_2.17\2.FM.pd	output~	#X obj -811 360	output~;
lec14_2.17\2.FM.pd	output~	#X obj -383 397	output~;
lec14_2.17\2.FM.pd	pack	#X obj -773 224	pack 0 30;
lec14_2.17\2.FM.pd	pack	#X obj -364 243	pack 0 30;
lec14_2.17\2.FM.pd	phasor~	#X obj -379 315	phasor~;
lec14_2.17\2.FM.pd	tabwrite~	#X obj -393 528	tabwrite~ tlec14_2.17c;
lec14_2.17\2.FM.pd	tgl	#X obj -369 466	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1
lec14_2.17\3.exponential.pd	*	#X obj 56 251	*;
lec14_2.17\3.exponential.pd	*~	#X obj 29 125	*~;
lec14_2.17\3.exponential.pd	*~	#X obj 60 125	*~;
lec14_2.17\3.exponential.pd	*~	#X obj 12 146	*~ 100;
lec14_2.17\3.exponential.pd	*~	#X obj 12 124	*~;
lec14_2.17\3.exponential.pd	*~	#X obj 15 222	*~;
lec14_2.17\3.exponential.pd	/	#X obj 16 448	/ 256;
lec14_2.17\3.exponential.pd	/	#X obj 191 456	/ 4096;
lec14_2.17\3.exponential.pd	/	#X obj 68 73	/ 10;
lec14_2.17\3.exponential.pd	+	#X obj 274 106	+ 1;
lec14_2.17\3.exponential.pd	+~	#X obj 12 168	+~ 1;
lec14_2.17\3.exponential.pd	+~	#X obj 12 83	+~ 1;
lec14_2.17\3.exponential.pd	biquad~	#X obj 29 181	biquad~ 0 0 0 0 1;
lec14_2.17\3.exponential.pd	block~	#X obj 332 109	block~ 4096 1;
lec14_2.17\3.exponential.pd	bng	#X obj 16 402	bng 18 250 50 0 empty empty empty 0 -6 0 8 -262144 -1
lec14_2.17\3.exponential.pd	bng	#X obj 84 298	bng 18 250 50 0 empty empty empty 0 -6 0 8 -262144 -1
lec14_2.17\3.exponential.pd	bng	#X obj 164 62	bng 15 250 50 0 empty empty empty 0 -6 0 8 -262144 -1
lec14_2.17\3.exponential.pd	expr	#X obj 104 164	expr exp(-(\$f1-1)/100);
lec14_2.17\3.exponential.pd	f	#X obj 236 106	f;

lec14_2.17\3.exponential.pd	ftom	#X obj 16 517	ftom;
lec14_2.17\3.exponential.pd	hip~	#X obj 16 346	hip~ 5;
lec14_2.17\3.exponential.pd	inlet	#X obj 208 212	inlet;
lec14_2.17\3.exponential.pd	inlet	#X obj 220 234	inlet;
lec14_2.17\3.exponential.pd	inlet~	#X obj 19 61	inlet~;
lec14_2.17\3.exponential.pd	line~	#X obj 68 120	line~;
lec14_2.17\3.exponential.pd	loadbang	#X obj 16 378	loadbang;
lec14_2.17\3.exponential.pd	metro	#X obj 220 257	metro 500;
lec14_2.17\3.exponential.pd	osc~	#X obj 12 57	osc~;
lec14_2.17\3.exponential.pd	osc~	#X obj 56 275	osc~;
lec14_2.17\3.exponential.pd	output~	#X obj 16 374	output~;
lec14_2.17\3.exponential.pd	pack	#X obj 68 96	pack 0 50;
lec14_2.17\3.exponential.pd	r	#X obj 12 30	r fundamental;
lec14_2.17\3.exponential.pd	r	#X obj 89 253	r fundamental;
lec14_2.17\3.exponential.pd	rfft~	#X obj 29 92	rfft~;
lec14_2.17\3.exponential.pd	s	#X obj 24 494	s fundamental;
lec14_2.17\3.exponential.pd	s	#X obj 191 502	s freq-step;
lec14_2.17\3.exponential.pd	samplerate~	#X obj 16 425	samplerate~;
lec14_2.17\3.exponential.pd	sel	#X obj 163 132	sel 999;
lec14_2.17\3.exponential.pd	sqrt~	#X obj 29 155	sqrt~;
lec14_2.17\3.exponential.pd	t	#X obj 164 81	t b b;
lec14_2.17\3.exponential.pd	t	#X obj 236 136	t f f;
lec14_2.17\3.exponential.pd	tabread4~	#X obj 13 190	tabread4~ E06-tab;
lec14_2.17\3.exponential.pd	tabwrite	#X obj 137 196	tabwrite E06-tab;
lec14_2.17\3.exponential.pd	tabwrite~	#X obj 208 295	tabwrite~ E06-spectrum;
lec14_2.17\3.exponential.pd	tabwrite~	#X obj 19 295	tabwrite~ E06-signal;
lec14_2.17\3.exponential.pd	tgl	#X obj 84 319	tgl 18 0 empty empty empty 0 -6 0 8 -262144 -1 -1 0 1
lec14_2.17\3.exponential.pd	until	#X obj 164 104	until;
lec14_2.17\4.sequencer.pd	bng	#X obj 44 115	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1

lec14_2.17\4.sequencer.pd	print	#X obj 51 244	print;
lec14_2.17\4.sequencer.pd	qlist	#X obj 15 280	qlist;
lec14_2.17\4.sequencer.pd	r	#X obj 27 374	r name1;
lec14_2.17\4.sequencer.pd	r	#X obj 94 377	r name2;
lec14_2.17\4.sequencer.pd	r	#X obj 44 91	r restart;
lec14_2.17\4.sequencer.pd	s	#X obj 29 348	s name1;
lec14_2.17\output~.pd	*~	#X obj 64 242	*~;
lec14_2.17\output~.pd	*~	#X obj 154 241	*~;
lec14_2.17\output~.pd	bng	#X obj 350 240	bng 15 250 50 0 empty empty mute -38 7 0 12 -262144
lec14_2.17\output~.pd	dac~	#X obj 64 272	dac~;
lec14_2.17\output~.pd	dbtorms	#X obj 29 97	dbtorms;
lec14_2.17\output~.pd	f	#X obj 353 437	f;
lec14_2.17\output~.pd	f	#X obj 353 515	f;
lec14_2.17\output~.pd	hip~	#X obj 85 192	hip~ 3;
lec14_2.17\output~.pd	hip~	#X obj 147 192	hip~ 3;
lec14_2.17\output~.pd	inlet~	#X obj 85 170	inlet~;
lec14_2.17\output~.pd	inlet~	#X obj 148 170	inlet~;
lec14_2.17\output~.pd	line~	#X obj 29 170	line~;
lec14_2.17\output~.pd	moses	#X obj 353 467	moses 1;
lec14_2.17\output~.pd	moses	#X obj 433 447	moses 1;
lec14_2.17\output~.pd	pack	#X obj 29 127	pack 0 50;
lec14_2.17\output~.pd	r	#X obj 323 174	r \\${0}-master-lvl;
lec14_2.17\output~.pd	r	#X obj 29 71	r \\${0}-master-out;
lec14_2.17\output~.pd	r	#X obj 433 418	r \\${0}-master-out;
lec14_2.17\output~.pd	s	#X obj 353 541	s \\${0}-master-lvl;
lec14_2.17\output~.pd	s	#X obj 323 279	s \\${0}-master-out;
lec14_2.17\output~.pd	t	#X obj 353 490	t b;
lec14_2.17\output~.pd	t	#X obj 467 486	t b f;
lec15_2.22\1.delay fm.pd	*~	#X obj 342 290	*~;

lec15_2.22\1.delay fm.pd	*~	#X obj 48 345	*~;
lec15_2.22\1.delay fm.pd	*~	#X obj 156 157	*~;
lec15_2.22\1.delay fm.pd	*~	#X obj 188 157	*~;
lec15_2.22\1.delay fm.pd	/~	#X obj 156 225	/~ 1;
lec15_2.22\1.delay fm.pd	+~	#X obj 342 322	+~;
lec15_2.22\1.delay fm.pd	+~	#X obj 156 191	+~;
lec15_2.22\1.delay fm.pd	block~	#X obj 209 88	block~ 2048;
lec15_2.22\1.delay fm.pd	dac~	#X obj 342 409	dac~;
lec15_2.22\1.delay fm.pd	delwrite~	#X obj 48 413	delwrite~ delay_line 1000;
lec15_2.22\1.delay fm.pd	expr	#X obj 48 261	expr 1 / (\$f1 / 44100);
lec15_2.22\1.delay fm.pd	inlet	#X obj 297 88	inlet;
lec15_2.22\1.delay fm.pd	inlet	#X obj 280 121	inlet;
lec15_2.22\1.delay fm.pd	inlet~	#X obj 156 88	inlet~;
lec15_2.22\1.delay fm.pd	inlet~	#X obj 189 124	inlet~;
lec15_2.22\1.delay fm.pd	metro	#X obj 297 138	metro 100;
lec15_2.22\1.delay fm.pd	metro	#X obj 252 158	metro 100;
lec15_2.22\1.delay fm.pd	osc~	#X obj 342 260	osc~;
lec15_2.22\1.delay fm.pd	phasor~	#X obj 48 317	phasor~;
lec15_2.22\1.delay fm.pd	rfft~	#X obj 156 120	rfft~;
lec15_2.22\1.delay fm.pd	sig~	#X obj 382 262	sig~;
lec15_2.22\1.delay fm.pd	sig~	#X obj 48 289	sig~;
lec15_2.22\1.delay fm.pd	sig~	#X obj 104 317	sig~;
lec15_2.22\1.delay fm.pd	soundfiler	#X obj 48 233	soundfiler;
lec15_2.22\1.delay fm.pd	tabread4~	#X obj 48 373	tabread4~ sound_array;
lec15_2.22\1.delay fm.pd	tabwrite~	#X obj 156 262	tabwrite~ spectrum;
lec15_2.22\1.delay fm.pd	tabwrite~	#X obj 252 193	tabwrite~ scope;
lec15_2.22\1.delay fm.pd	tgl	#X obj 484 350	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec15_2.22\1.delay fm.pd	vd~	#X obj 342 356	vd~ delay_line;
lec15_2.22\2.basic envelope.pd	*~	#X obj -339 240	*~;

lec15_2.22\2.basic envelope.pd	*~	#X obj -339 314	*~;
lec15_2.22\2.basic envelope.pd	*~	#X obj -339 353	*~ 0.5;
lec15_2.22\2.basic envelope.pd	/	#X obj -321 162	/ 100;
lec15_2.22\2.basic envelope.pd	cos~	#X obj -339 271	cos~;
lec15_2.22\2.basic envelope.pd	dac~	#X obj -339 387	dac~;
lec15_2.22\2.basic envelope.pd	inlet	#X obj 280 121	inlet;
lec15_2.22\2.basic envelope.pd	inlet~	#X obj 189 124	inlet~;
lec15_2.22\2.basic envelope.pd	line~	#X obj -321 209	line~;
lec15_2.22\2.basic envelope.pd	metro	#X obj 252 158	metro 100;
lec15_2.22\2.basic envelope.pd	osc~	#X obj -339 108	osc~;
lec15_2.22\2.basic envelope.pd	pack	#X obj -321 185	pack 0 30;
lec15_2.22\2.basic envelope.pd	tabwrite~	#X obj 252 193	tabwrite~ scope;
lec15_2.22\2.basic envelope.pd	tgl	#X obj -234 323	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1
lec15_2.22\2.basic envelope.pd	vline~	#X obj -197 239	vline~;
lec15_2.22\3.calculated envelope.pd	*~	#X obj -339 240	*~;
lec15_2.22\3.calculated envelope.pd	*~	#X obj -339 314	*~;
lec15_2.22\3.calculated envelope.pd	*~	#X obj -339 357	*~ 0.5;
lec15_2.22\3.calculated envelope.pd	/	#X obj -321 162	/ 100;
lec15_2.22\3.calculated envelope.pd	bng	#X obj -166 119	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec15_2.22\3.calculated envelope.pd	bng	#X obj 63 345	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec15_2.22\3.calculated envelope.pd	bng	#X obj 63 124	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec15_2.22\3.calculated envelope.pd	cos~	#X obj -339 271	cos~;
lec15_2.22\3.calculated envelope.pd	dac~	#X obj -339 386	dac~;
lec15_2.22\3.calculated envelope.pd	delay	#X obj -88 166	delay 250;
lec15_2.22\3.calculated envelope.pd	expr	#X obj 62 494	expr 1 - ((cos((\$f1 / 8192) * 6.28318) + 1) /
lec15_2.22\3.calculated envelope.pd	expr	#X obj 63 270	expr 1 - sqrt(\$f1 / 8192);
lec15_2.22\3.calculated envelope.pd	inlet	#X obj 280 121	inlet;
lec15_2.22\3.calculated envelope.pd	inlet~	#X obj 189 124	inlet~;
lec15_2.22\3.calculated envelope.pd	line	#X obj 62 457	line 0 1;

lec15_2.22\3.calculated envelope.pd	line	#X obj -166 221	line 0 1;
lec15_2.22\3.calculated envelope.pd	line	#X obj 63 230	line 0 1;
lec15_2.22\3.calculated envelope.pd	line~	#X obj -321 209	line~;
lec15_2.22\3.calculated envelope.pd	metro	#X obj 252 158	metro 100;
lec15_2.22\3.calculated envelope.pd	osc~	#X obj -339 108	osc~;
lec15_2.22\3.calculated envelope.pd	pack	#X obj -321 185	pack 0 30;
lec15_2.22\3.calculated envelope.pd	sig~	#X obj -166 276	sig~;
lec15_2.22\3.calculated envelope.pd	t	#X obj 63 375	t b b;
lec15_2.22\3.calculated envelope.pd	t	#X obj 63 153	t b b;
lec15_2.22\3.calculated envelope.pd	tabread	#X obj -166 251	tabread envelope;
lec15_2.22\3.calculated envelope.pd	tabwrite	#X obj 62 540	tabwrite envelope;
lec15_2.22\3.calculated envelope.pd	tabwrite	#X obj 63 305	tabwrite envelope;
lec15_2.22\3.calculated envelope.pd	tabwrite~	#X obj 252 193	tabwrite~ scope;
lec15_2.22\3.calculated envelope.pd	tgl	#X obj -236 327	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1
lec15_2.22\4.chowning.pd	*~	#X obj 186 304	*~;
lec15_2.22\4.chowning.pd	*~	#X obj 96 421	*~;
lec15_2.22\4.chowning.pd	*~	#X obj 96 497	*~ 0.5;
lec15_2.22\4.chowning.pd	*~	#X obj 156 157	*~;
lec15_2.22\4.chowning.pd	*~	#X obj 188 157	*~;
lec15_2.22\4.chowning.pd	/	#X obj 139 172	/ 50;
lec15_2.22\4.chowning.pd	/~	#X obj 156 225	/~ 64;
lec15_2.22\4.chowning.pd	+~	#X obj 96 341	+~;
lec15_2.22\4.chowning.pd	+~	#X obj 156 191	+~;
lec15_2.22\4.chowning.pd	block~	#X obj 209 88	block~ 2048;
lec15_2.22\4.chowning.pd	bng	#X obj 517 16	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144 -1
lec15_2.22\4.chowning.pd	cos~	#X obj 96 379	cos~;
lec15_2.22\4.chowning.pd	dac~	#X obj 96 535	dac~;
lec15_2.22\4.chowning.pd	inlet	#X obj 297 88	inlet;
lec15_2.22\4.chowning.pd	inlet	#X obj 280 121	inlet;

lec15_2.22\4.chowning.pd	inlet~	#X obj 156 88	inlet~;
lec15_2.22\4.chowning.pd	inlet~	#X obj 189 124	inlet~;
lec15_2.22\4.chowning.pd	metro	#X obj 297 138	metro 100;
lec15_2.22\4.chowning.pd	metro	#X obj 252 158	metro 100;
lec15_2.22\4.chowning.pd	mtof	#X obj 96 152	mtof;
lec15_2.22\4.chowning.pd	osc~	#X obj 96 280	osc~;
lec15_2.22\4.chowning.pd	osc~	#X obj 186 248	osc~;
lec15_2.22\4.chowning.pd	qlist	#X obj 539 70	qlist;
lec15_2.22\4.chowning.pd	r	#X obj 134 341	r carrier_env;
lec15_2.22\4.chowning.pd	r	#X obj 234 218	r modulator_env;
lec15_2.22\4.chowning.pd	r	#X obj 437 143	r note;
lec15_2.22\4.chowning.pd	r	#X obj 186 126	r modulator;
lec15_2.22\4.chowning.pd	r	#X obj 96 125	r pitch;
lec15_2.22\4.chowning.pd	r	#X obj 26 125	r carrier;
lec15_2.22\4.chowning.pd	rfft~	#X obj 156 120	rfft~;
lec15_2.22\4.chowning.pd	s	#X obj 437 305	s carrier_env;
lec15_2.22\4.chowning.pd	s	#X obj 534 305	s modulator_env;
lec15_2.22\4.chowning.pd	tabwrite~	#X obj 156 262	tabwrite~ spectrum;
lec15_2.22\4.chowning.pd	tabwrite~	#X obj 252 193	tabwrite~ scope;
lec15_2.22\4.chowning.pd	tgl	#X obj 269 468	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec15_2.22\4.chowning.pd	vline~	#X obj 234 246	vline~;
lec15_2.22\4.chowning.pd	vline~	#X obj 134 379	vline~;
lec16_2.24\1.new-objects.pd	delread~	#X obj 59 129	delread~;
lec16_2.24\1.new-objects.pd	delwrite~	#X obj 59 97	delwrite~;
lec16_2.24\1.new-objects.pd	lop~	#X obj 60 240	lop~;
lec16_2.24\1.new-objects.pd	noise~	#X obj 58 203	noise~;
lec16_2.24\1.new-objects.pd	vd~	#X obj 60 163	vd~;
lec16_2.24\2.delay-read-write.pd	adc~	#X obj 58 70	adc~;
lec16_2.24\2.delay-read-write.pd	delread~	#X obj 59 274	delread~ delay1;

lec16_2.24\2.delay-read-write.pd	delread~	#X obj 328 280	delread~ delay1;
lec16_2.24\2.delay-read-write.pd	delwrite~	#X obj 58 98	delwrite~ delay1 5000;
lec16_2.24\2.delay-read-write.pd	output~	#X obj 58 313	output~;
lec16_2.24\2.delay-read-write.pd	output~	#X obj 271 318	output~;
lec16_2.24\3.delay-recirculate.pd	*~	#X obj 251 141	*~;
lec16_2.24\3.delay-recirculate.pd	*~	#X obj 106 170	*~;
lec16_2.24\3.delay-recirculate.pd	*~	#X obj 351 197	*~;
lec16_2.24\3.delay-recirculate.pd	*~	#X obj 351 165	*~ 0.1;
lec16_2.24\3.delay-recirculate.pd	*~	#X obj 510 180	*~;
lec16_2.24\3.delay-recirculate.pd	*~	#X obj 510 148	*~ 0.1;
lec16_2.24\3.delay-recirculate.pd	/	#X obj 283 639	/;
lec16_2.24\3.delay-recirculate.pd	+~	#X obj 105 245	+~;
lec16_2.24\3.delay-recirculate.pd	+~	#X obj 351 230	+~;
lec16_2.24\3.delay-recirculate.pd	adc~	#X obj 250 112	adc~;
lec16_2.24\3.delay-recirculate.pd	delread~	#X obj 43 322	delread~ delay1;
lec16_2.24\3.delay-recirculate.pd	delwrite~	#X obj 106 278	delwrite~ delay1 5000;
lec16_2.24\3.delay-recirculate.pd	mtof	#X obj 256 525	mtof;
lec16_2.24\3.delay-recirculate.pd	noise~	#X obj 510 120	noise~;
lec16_2.24\3.delay-recirculate.pd	osc~	#X obj 351 137	osc~ 500;
lec16_2.24\3.delay-recirculate.pd	output~	#X obj 43 364	output~;
lec16_2.24\3.delay-recirculate.pd	output~	#X obj 351 275	output~;
lec16_2.24\3.delay-recirculate.pd	r	#X obj 19 222	r msec;
lec16_2.24\3.delay-recirculate.pd	s	#X obj 283 667	s msec;
lec16_2.24\3.delay-recirculate.pd	t	#X obj 262 579	t b f;
lec16_2.24\3.delay-recirculate.pd	tgl	#X obj 131 142	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec16_2.24\3.delay-recirculate.pd	tgl	#X obj 303 145	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec16_2.24\3.delay-recirculate.pd	tgl	#X obj 403 201	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec16_2.24\3.delay-recirculate.pd	tgl	#X obj 562 184	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec16_2.24\4.delay-gain-recirculate.pd	*~	#X obj 322 245	*~;

lec16_2.24\4.delay-gain-recirculate.pd	*~	#X obj 103 251	*~;
lec16_2.24\4.delay-gain-recirculate.pd	*~	#X obj 401 253	*~;
lec16_2.24\4.delay-gain-recirculate.pd	*~	#X obj 401 221	*~ 0.1;
lec16_2.24\4.delay-gain-recirculate.pd	*~	#X obj 501 254	*~;
lec16_2.24\4.delay-gain-recirculate.pd	*~	#X obj 501 222	*~ 0.1;
lec16_2.24\4.delay-gain-recirculate.pd	/	#X obj 450 523	/;
lec16_2.24\4.delay-gain-recirculate.pd	/	#X obj 144 241	/ 100;
lec16_2.24\4.delay-gain-recirculate.pd	+~	#X obj 104 281	+~;
lec16_2.24\4.delay-gain-recirculate.pd	+~	#X obj 401 286	+~;
lec16_2.24\4.delay-gain-recirculate.pd	adc~	#X obj 321 216	adc~;
lec16_2.24\4.delay-gain-recirculate.pd	delread~	#X obj 39 411	delread~ delay1;
lec16_2.24\4.delay-gain-recirculate.pd	delwrite~	#X obj 103 376	delwrite~ delay1 5000;
lec16_2.24\4.delay-gain-recirculate.pd	mtof	#X obj 423 409	mtof;
lec16_2.24\4.delay-gain-recirculate.pd	noise~	#X obj 501 194	noise~;
lec16_2.24\4.delay-gain-recirculate.pd	osc~	#X obj 401 193	osc~ 500;
lec16_2.24\4.delay-gain-recirculate.pd	output~	#X obj 124 314	output~;
lec16_2.24\4.delay-gain-recirculate.pd	r	#X obj 38 184	r msec;
lec16_2.24\4.delay-gain-recirculate.pd	s	#X obj 450 551	s msec;
lec16_2.24\4.delay-gain-recirculate.pd	t	#X obj 429 463	t b f;
lec16_2.24\4.delay-gain-recirculate.pd	tgl	#X obj 374 249	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec16_2.24\4.delay-gain-recirculate.pd	tgl	#X obj 453 257	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec16_2.24\4.delay-gain-recirculate.pd	tgl	#X obj 553 258	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec16_2.24\output~.pd	*~	#X obj 64 242	*~;
lec16_2.24\output~.pd	*~	#X obj 154 241	*~;
lec16_2.24\output~.pd	bng	#X obj 350 240	bng 15 250 50 0 empty empty mute -38 7 0 12 -262144
lec16_2.24\output~.pd	dac~	#X obj 64 272	dac~;
lec16_2.24\output~.pd	dbtorms	#X obj 29 97	dbtorms;
lec16_2.24\output~.pd	f	#X obj 353 437	f;
lec16_2.24\output~.pd	f	#X obj 353 515	f;

lec16_2.24\output~.pd	hip~	#X obj 85 192	hip~ 3;
lec16_2.24\output~.pd	hip~	#X obj 147 192	hip~ 3;
lec16_2.24\output~.pd	inlet~	#X obj 85 170	inlet~;
lec16_2.24\output~.pd	inlet~	#X obj 148 170	inlet~;
lec16_2.24\output~.pd	line~	#X obj 29 170	line~;
lec16_2.24\output~.pd	moses	#X obj 353 467	moses 1;
lec16_2.24\output~.pd	moses	#X obj 433 447	moses 1;
lec16_2.24\output~.pd	pack	#X obj 29 127	pack 0 50;
lec16_2.24\output~.pd	r	#X obj 323 174	r \\${0-master-lvl};
lec16_2.24\output~.pd	r	#X obj 29 71	r \\${0-master-out};
lec16_2.24\output~.pd	r	#X obj 433 418	r \\${0-master-out};
lec16_2.24\output~.pd	s	#X obj 353 541	s \\${0-master-lvl};
lec16_2.24\output~.pd	s	#X obj 323 279	s \\${0-master-out};
lec16_2.24\output~.pd	t	#X obj 353 490	t b;
lec16_2.24\output~.pd	t	#X obj 467 486	t b f;
lec17_3.01\1 feedback delay.pd	*~	#X obj 409 325	*~;
lec17_3.01\1 feedback delay.pd	*~	#X obj 252 163	*~;
lec17_3.01\1 feedback delay.pd	/	#X obj 361 290	/ 100;
lec17_3.01\1 feedback delay.pd	dac~	#X obj 311 398	dac~;
lec17_3.01\1 feedback delay.pd	delread~	#X obj 436 295	delread~ delay_line 250;
lec17_3.01\1 feedback delay.pd	delwrite~	#X obj 436 258	delwrite~ delay_line 1000;
lec17_3.01\1 feedback delay.pd	osc~	#X obj 251 60	osc~ 220;
lec17_3.01\1 feedback delay.pd	receive~	#X obj 436 206	receive~ feedback;
lec17_3.01\1 feedback delay.pd	send~	#X obj 411 401	send~ feedback;
lec17_3.01\1 feedback delay.pd	vline~	#X obj 290 134	vline~;
lec17_3.01\2 multitap.pd	*~	#X obj 312 363	*~;
lec17_3.01\2 multitap.pd	*~	#X obj 252 163	*~;
lec17_3.01\2 multitap.pd	/	#X obj 264 328	/ 100;
lec17_3.01\2 multitap.pd	dac~	#X obj 513 427	dac~;

lec17_3.01\2 multitap.pd	delread~	#X obj 436 292	delread~ dly 250;
lec17_3.01\2 multitap.pd	delread~	#X obj 605 292	delread~ dly 500;
lec17_3.01\2 multitap.pd	delread~	#X obj 773 296	delread~ dly 750;
lec17_3.01\2 multitap.pd	delwrite~	#X obj 436 258	delwrite~ dly 1000;
lec17_3.01\2 multitap.pd	osc~	#X obj 252 78	osc~ 440;
lec17_3.01\2 multitap.pd	receive~	#X obj 436 206	receive~ feedback;
lec17_3.01\2 multitap.pd	send~	#X obj 320 430	send~ feedback;
lec17_3.01\2 multitap.pd	vline~	#X obj 279 134	vline~;
lec17_3.01\3 tape echo.pd	*~	#X obj 409 325	*~;
lec17_3.01\3 tape echo.pd	/	#X obj 361 290	/ 100;
lec17_3.01\3 tape echo.pd	bp~	#X obj 550 426	bp~ 1000 10;
lec17_3.01\3 tape echo.pd	dac~	#X obj 311 398	dac~;
lec17_3.01\3 tape echo.pd	delread~	#X obj 436 295	delread~ delay_line 250;
lec17_3.01\3 tape echo.pd	delwrite~	#X obj 436 258	delwrite~ delay_line 1000;
lec17_3.01\3 tape echo.pd	key	#X obj 232 20	key;
lec17_3.01\3 tape echo.pd	loopvox~	#X obj 252 163	loopvox~;
lec17_3.01\3 tape echo.pd	lop~	#X obj 420 418	lop~;
lec17_3.01\3 tape echo.pd	receive~	#X obj 436 206	receive~ feedback;
lec17_3.01\3 tape echo.pd	sel	#X obj 243 74	sel 32;
lec17_3.01\3 tape echo.pd	send~	#X obj 420 506	send~ feedback;
lec17_3.01\3 tape echo.pd	tgl	#X obj 241 117	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec17_3.01\4 envelope.pd	bng	#X obj 172 115	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec17_3.01\4 envelope.pd	expr	#X obj 166 304	expr 1-((cos((\$f1/8192))*6.28318)+1)/2);
lec17_3.01\4 envelope.pd	line	#X obj 172 238	line 0 1;
lec17_3.01\4 envelope.pd	t	#X obj 172 148	t b b;
lec17_3.01\4 envelope.pd	tabwrite	#X obj 166 351	tabwrite envelope;
lec17_3.01\5 brassage.pd	*~	#X obj 469 376	*~;
lec17_3.01\5 brassage.pd	*~	#X obj 424 181	*~ 8192;
lec17_3.01\5 brassage.pd	*~	#X obj 684 356	*~;

lec17_3.01\5 brassage.pd	*~	#X obj 606 193	*~ 8912;
lec17_3.01\5 brassage.pd	*~	#X obj 246 269	*~ 25;
lec17_3.01\5 brassage.pd	*~	#X obj 821 226	*~ 25;
lec17_3.01\5 brassage.pd	/	#X obj 475 -4	/ -25;
lec17_3.01\5 brassage.pd	+~	#X obj 588 462	+~;
lec17_3.01\5 brassage.pd	+~	#X obj 607 122	+~ 0.5;
lec17_3.01\5 brassage.pd	dac~	#X obj 579 516	dac~;
lec17_3.01\5 brassage.pd	delwrite~	#X obj 34 99	delwrite~ delay_line 25;
lec17_3.01\5 brassage.pd	loopvox~	#X obj 34 61	loopvox~;
lec17_3.01\5 brassage.pd	phasor~	#X obj 468 65	phasor~;
lec17_3.01\5 brassage.pd	table	#X obj 33 -5	table envelope 8192;
lec17_3.01\5 brassage.pd	tabread4~	#X obj 423 232	tabread4~ envelope;
lec17_3.01\5 brassage.pd	tabread4~	#X obj 611 232	tabread4~ envelope;
lec17_3.01\5 brassage.pd	tgl	#X obj 34 27	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0 1
lec17_3.01\5 brassage.pd	vd~	#X obj 246 299	vd~ delay_line 25;
lec17_3.01\5 brassage.pd	vd~	#X obj 821 256	vd~ delay_line 25;
lec17_3.01\5 brassage.pd	wrap~	#X obj 607 154	wrap~;
lec17_3.01\6 delay reverb.pd	*~	#X obj 169 390	*~;
lec17_3.01\6 delay reverb.pd	*~	#X obj 216 389	*~;
lec17_3.01\6 delay reverb.pd	*~	#X obj 309 383	*~;
lec17_3.01\6 delay reverb.pd	*~	#X obj 399 372	*~;
lec17_3.01\6 delay reverb.pd	/	#X obj 550 261	/ 200;
lec17_3.01\6 delay reverb.pd	--	#X obj 202 246	--;
lec17_3.01\6 delay reverb.pd	--	#X obj 356 242	--;
lec17_3.01\6 delay reverb.pd	--	#X obj 322 323	--;
lec17_3.01\6 delay reverb.pd	--	#X obj 382 319	--;
lec17_3.01\6 delay reverb.pd	+~	#X obj 155 149	+~;
lec17_3.01\6 delay reverb.pd	+~	#X obj 203 150	+~;
lec17_3.01\6 delay reverb.pd	+~	#X obj 159 243	+~;

lec17_3.01\6 delay reverb.pd	+~	#X obj 316 243	+~;
lec17_3.01\6 delay reverb.pd	+~	#X obj 157 321	+~;
lec17_3.01\6 delay reverb.pd	+~	#X obj 212 325	+~;
lec17_3.01\6 delay reverb.pd	dac~	#X obj 44 344	dac~;
lec17_3.01\6 delay reverb.pd	delread~	#X obj 185 39	delread~ dly1 43;
lec17_3.01\6 delay reverb.pd	delread~	#X obj 231 70	delread~ dly2 59;
lec17_3.01\6 delay reverb.pd	delread~	#X obj 319 101	delread~ dly1 71;
lec17_3.01\6 delay reverb.pd	delread~	#X obj 365 132	delread~ dly2 89;
lec17_3.01\6 delay reverb.pd	delwrite~	#X obj 172 526	delwrite~ dly1 43;
lec17_3.01\6 delay reverb.pd	delwrite~	#X obj 259 486	delwrite~ dly2 59;
lec17_3.01\6 delay reverb.pd	delwrite~	#X obj 326 443	delwrite~ dly3 71;
lec17_3.01\6 delay reverb.pd	delwrite~	#X obj 391 401	delwrite~ dly4 89;
lec17_3.01\6 delay reverb.pd	loopvox~	#X obj 45 59	loopvox~;
lec17_3.01\6 delay reverb.pd	tgl	#X obj 45 16	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0 1
lec17_3.01\7 grain delay.pd	*~	#X obj 418 476	*~;
lec17_3.01\7 grain delay.pd	*~	#X obj 597 363	*~ 8192;
lec17_3.01\7 grain delay.pd	/~	#X obj 234 253	/~ 2;
lec17_3.01\7 grain delay.pd	+~	#X obj 232 224	+~ 1;
lec17_3.01\7 grain delay.pd	dac~	#X obj 410 538	dac~;
lec17_3.01\7 grain delay.pd	delwrite~	#X obj 33 100	delwrite~ delay_line 1000;
lec17_3.01\7 grain delay.pd	expr	#X obj 329 104	expr 1 / (\$f1 / 1000);
lec17_3.01\7 grain delay.pd	expr~	#X obj 220 352	expr~ \$v1 * (1000 - \$f2);
lec17_3.01\7 grain delay.pd	loopvox~	#X obj 34 61	loopvox~;
lec17_3.01\7 grain delay.pd	noise~	#X obj 232 182	noise~;
lec17_3.01\7 grain delay.pd	phasor~	#X obj 329 155	phasor~;
lec17_3.01\7 grain delay.pd	samphold~	#X obj 233 289	samphold~;
lec17_3.01\7 grain delay.pd	table	#X obj 33 -5	table envelope 8192;
lec17_3.01\7 grain delay.pd	tabread4~	#X obj 596 414	tabread4~ envelope;
lec17_3.01\7 grain delay.pd	tgl	#X obj 34 27	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 1 1

lec17_3.01\7 grain delay.pd	vd~	#X obj 411 411	vd~ delay_line;
lec17_3.01\loopvox~.pd	*~	#X obj 34 263	*~;
lec17_3.01\loopvox~.pd	expr	#X obj 34 179	expr 1 / (\$f1 / 44100);
lec17_3.01\loopvox~.pd	inlet	#X obj 34 32	inlet;
lec17_3.01\loopvox~.pd	outlet~	#X obj 34 328	outlet~;
lec17_3.01\loopvox~.pd	phasor~	#X obj 34 235	phasor~;
lec17_3.01\loopvox~.pd	sel	#X obj 34 61	sel 1;
lec17_3.01\loopvox~.pd	sig~	#X obj 34 207	sig~;
lec17_3.01\loopvox~.pd	sig~	#X obj 115 236	sig~;
lec17_3.01\loopvox~.pd	soundfiler	#X obj 34 151	soundfiler;
lec17_3.01\loopvox~.pd	tabread4~	#X obj 34 291	tabread4~ sound_array;
lec18_3.03\1.new-objects.pd	block~	#X obj 60 240	block~;
lec18_3.03\1.new-objects.pd	bp~	#X obj 60 164	bp~;
lec18_3.03\1.new-objects.pd	hip~	#X obj 59 97	hip~;
lec18_3.03\1.new-objects.pd	lop~	#X obj 59 129	lop~;
lec18_3.03\1.new-objects.pd	vcf~	#X obj 60 199	vcf~;
lec18_3.03\2.by-the-way-table-sequencer.pd	+	#X obj 125 123	+ 1;
lec18_3.03\2.by-the-way-table-sequencer.pd	f	#X obj 86 127	f;
lec18_3.03\2.by-the-way-table-sequencer.pd	metro	#X obj 86 92	metro 150;
lec18_3.03\2.by-the-way-table-sequencer.pd	mod	#X obj 125 150	mod 8;
lec18_3.03\2.by-the-way-table-sequencer.pd	tabread	#X obj 86 177	tabread array1;
lec18_3.03\2.by-the-way-table-sequencer.pd	tgl	#X obj 87 69	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0 1
lec18_3.03\3.delay-gain-recirculate-revisited.pd	*~	#X obj 167 231	*~;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	*~	#X obj 246 239	*~;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	*~	#X obj 246 207	*~ 0.1;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	*~	#X obj 346 240	*~;

lec18_3.03\3.delay-gain-recirculate-revisited.pd	*~	#X obj 346 208	*~ 0.1;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	*~	#X obj 118 145	*~;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	/	#X obj 450 523	/;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	/	#X obj 463 296	/ 100;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	+~	#X obj 246 272	+~;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	+~	#X obj 119 175	+~;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	adc~	#X obj 166 202	adc~;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	block~	#X obj 274 71	block~ 1;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	delread~	#X obj 117 115	delread~ delay1;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	delwrite~	#X obj 119 208	delwrite~ delay1 5000;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	inlet	#X obj 254 149	inlet;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	inlet~	#X obj 165 176	inlet~;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	mtof	#X obj 423 409	mtof;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	noise~	#X obj 346 180	noise~;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	osc~	#X obj 246 179	osc~ 500;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	outlet~	#X obj 26 216	outlet~;
lec18_3.03\3.delay-gain-recirculate-	output~	#X obj 194 386	output~;

revisited.pd			
lec18_3.03\3.delay-gain-recirculate-revisited.pd	r	#X obj 115 58	r msec;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	s	#X obj 450 551	s msec;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	t	#X obj 429 463	t b f;
lec18_3.03\3.delay-gain-recirculate-revisited.pd	tgl	#X obj 219 235	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec18_3.03\3.delay-gain-recirculate-revisited.pd	tgl	#X obj 298 243	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec18_3.03\3.delay-gain-recirculate-revisited.pd	tgl	#X obj 398 244	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec18_3.03\4.filter-menagerie.pd	*~	#X obj 12 226	*~;
lec18_3.03\4.filter-menagerie.pd	*~	#X obj 91 234	*~;
lec18_3.03\4.filter-menagerie.pd	*~	#X obj 91 202	*~ 0.1;
lec18_3.03\4.filter-menagerie.pd	*~	#X obj 191 235	*~;
lec18_3.03\4.filter-menagerie.pd	*~	#X obj 191 203	*~ 0.1;
lec18_3.03\4.filter-menagerie.pd	*~	#X obj 408 374	*~;
lec18_3.03\4.filter-menagerie.pd	+	#X obj 454 373	+ 1;
lec18_3.03\4.filter-menagerie.pd	+~	#X obj 165 274	+~;
lec18_3.03\4.filter-menagerie.pd	adc~	#X obj 11 197	adc~;
lec18_3.03\4.filter-menagerie.pd	bng	#X obj 273 216	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec18_3.03\4.filter-menagerie.pd	bp~	#X obj 408 341	bp~;
lec18_3.03\4.filter-menagerie.pd	hip~	#X obj 250 376	hip~;
lec18_3.03\4.filter-menagerie.pd	lop~	#X obj 126 379	lop~;
lec18_3.03\4.filter-menagerie.pd	mtof	#X obj 169 359	mtof;
lec18_3.03\4.filter-menagerie.pd	mtof	#X obj 290 353	mtof;
lec18_3.03\4.filter-menagerie.pd	mtof	#X obj 428 270	mtof;
lec18_3.03\4.filter-menagerie.pd	noise~	#X obj 191 175	noise~;

lec18_3.03\4.filter-menagerie.pd	osc~	#X obj 91 174	osc~ 500;
lec18_3.03\4.filter-menagerie.pd	output~	#X obj 127 407	output~;
lec18_3.03\4.filter-menagerie.pd	output~	#X obj 4 358	output~;
lec18_3.03\4.filter-menagerie.pd	output~	#X obj 248 409	output~;
lec18_3.03\4.filter-menagerie.pd	output~	#X obj 407 403	output~;
lec18_3.03\4.filter-menagerie.pd	table	#X obj 307 66	table foo 10;
lec18_3.03\4.filter-menagerie.pd	tabplay~	#X obj 271 234	tabplay~ foo;
lec18_3.03\4.filter-menagerie.pd	tgl	#X obj 50 229	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec18_3.03\4.filter-menagerie.pd	tgl	#X obj 128 236	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec18_3.03\4.filter-menagerie.pd	tgl	#X obj 229 234	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec18_3.03\5.delay-recirculate-complex.pd	*	#X obj 515 413	* 6.283;
lec18_3.03\5.delay-recirculate-complex.pd	*~	#X obj 322 245	*~;
lec18_3.03\5.delay-recirculate-complex.pd	*~	#X obj 401 253	*~;
lec18_3.03\5.delay-recirculate-complex.pd	*~	#X obj 401 221	*~ 0.1;
lec18_3.03\5.delay-recirculate-complex.pd	*~	#X obj 501 254	*~;
lec18_3.03\5.delay-recirculate-complex.pd	*~	#X obj 501 222	*~ 0.1;
lec18_3.03\5.delay-recirculate-complex.pd	*~	#X obj 25 144	*~;
lec18_3.03\5.delay-recirculate-complex.pd	*~	#X obj 74 149	*~;
lec18_3.03\5.delay-recirculate-complex.pd	*~	#X obj 177 154	*~;
lec18_3.03\5.delay-recirculate-complex.pd	*~	#X obj 226 159	*~;
lec18_3.03\5.delay-recirculate-complex.pd	/	#X obj 144 241	/ 100;
lec18_3.03\5.delay-recirculate-complex.pd	/	#X obj 515 445	/ 44100;
lec18_3.03\5.delay-recirculate-complex.pd	--	#X obj 25 175	--;
lec18_3.03\5.delay-recirculate-complex.pd	+~	#X obj 401 286	+~;
lec18_3.03\5.delay-recirculate-complex.pd	+~	#X obj 25 223	+~;
lec18_3.03\5.delay-recirculate-complex.pd	+~	#X obj 177 185	+~;
lec18_3.03\5.delay-recirculate-complex.pd	adc~	#X obj 321 216	adc~;
lec18_3.03\5.delay-recirculate-complex.pd	block~	#X obj 123 11	block~ 1;
lec18_3.03\5.delay-recirculate-complex.pd	delread~	#X obj 21 41	delread~ delay-real;

lec18_3.03\5.delay-recirculate-complex.pd	delread~	#X obj 230 42	delread~ delay-im;
lec18_3.03\5.delay-recirculate-complex.pd	delwrite~	#X obj 24 257	delwrite~ delay-real 1;
lec18_3.03\5.delay-recirculate-complex.pd	delwrite~	#X obj 266 258	delwrite~ delay-im 1;
lec18_3.03\5.delay-recirculate-complex.pd	expr	#X obj 217 435	expr \$f1 * cos(\$f2);
lec18_3.03\5.delay-recirculate-complex.pd	expr	#X obj 247 465	expr \$f1 * sin(\$f2);
lec18_3.03\5.delay-recirculate-complex.pd	inlet	#X obj 399 81	inlet;
lec18_3.03\5.delay-recirculate-complex.pd	inlet	#X obj 455 83	inlet;
lec18_3.03\5.delay-recirculate-complex.pd	inlet~	#X obj 66 225	inlet~;
lec18_3.03\5.delay-recirculate-complex.pd	mtof	#X obj 520 352	mtof;
lec18_3.03\5.delay-recirculate-complex.pd	noise~	#X obj 501 194	noise~;
lec18_3.03\5.delay-recirculate-complex.pd	osc~	#X obj 401 193	osc~ 500;
lec18_3.03\5.delay-recirculate-complex.pd	outlet~	#X obj 11 288	outlet~;
lec18_3.03\5.delay-recirculate-complex.pd	outlet~	#X obj 179 286	outlet~;
lec18_3.03\5.delay-recirculate-complex.pd	output~	#X obj 39 455	output~;
lec18_3.03\5.delay-recirculate-complex.pd	output~	#X obj 118 456	output~;
lec18_3.03\5.delay-recirculate-complex.pd	r	#X obj 38 184	r msec;
lec18_3.03\5.delay-recirculate-complex.pd	s	#X obj 450 551	s msec;
lec18_3.03\5.delay-recirculate-complex.pd	t	#X obj 283 378	t b f;
lec18_3.03\5.delay-recirculate-complex.pd	tgl	#X obj 374 249	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec18_3.03\5.delay-recirculate-complex.pd	tgl	#X obj 453 257	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec18_3.03\5.delay-recirculate-complex.pd	tgl	#X obj 553 258	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 1
lec18_3.03\output~.pd	*~	#X obj 64 242	*~;
lec18_3.03\output~.pd	*~	#X obj 154 241	*~;
lec18_3.03\output~.pd	bng	#X obj 350 240	bng 15 250 50 0 empty empty mute -38 7 0 12 -262144
lec18_3.03\output~.pd	dac~	#X obj 64 272	dac~;
lec18_3.03\output~.pd	dbtorms	#X obj 29 97	dbtorms;
lec18_3.03\output~.pd	f	#X obj 353 437	f;
lec18_3.03\output~.pd	f	#X obj 353 515	f;
lec18_3.03\output~.pd	hip~	#X obj 85 192	hip~ 3;

lec18_3.03\output~.pd	hip~	#X obj 147 192	hip~ 3;
lec18_3.03\output~.pd	inlet~	#X obj 85 170	inlet~;
lec18_3.03\output~.pd	inlet~	#X obj 148 170	inlet~;
lec18_3.03\output~.pd	line~	#X obj 29 170	line~;
lec18_3.03\output~.pd	moses	#X obj 353 467	moses 1;
lec18_3.03\output~.pd	moses	#X obj 433 447	moses 1;
lec18_3.03\output~.pd	pack	#X obj 29 127	pack 0 50;
lec18_3.03\output~.pd	r	#X obj 323 174	r \\${0}-master-lvl;
lec18_3.03\output~.pd	r	#X obj 29 71	r \\${0}-master-out;
lec18_3.03\output~.pd	r	#X obj 433 418	r \\${0}-master-out;
lec18_3.03\output~.pd	s	#X obj 353 541	s \\${0}-master-lvl;
lec18_3.03\output~.pd	s	#X obj 323 279	s \\${0}-master-out;
lec18_3.03\output~.pd	t	#X obj 353 490	t b;
lec18_3.03\output~.pd	t	#X obj 467 486	t b f;
lec19_3.08\1.delay-inverse.pd	*	#X obj 522 339	* -1;
lec19_3.08\1.delay-inverse.pd	*~	#X obj 52 201	*~;
lec19_3.08\1.delay-inverse.pd	*~	#X obj 111 204	*~;
lec19_3.08\1.delay-inverse.pd	*~	#X obj 111 181	*~ 0.1;
lec19_3.08\1.delay-inverse.pd	*~	#X obj 180 205	*~;
lec19_3.08\1.delay-inverse.pd	*~	#X obj 180 181	*~ 0.1;
lec19_3.08\1.delay-inverse.pd	*~	#X obj 207 489	*~;
lec19_3.08\1.delay-inverse.pd	*~	#X obj 174 338	*~;
lec19_3.08\1.delay-inverse.pd	/	#X obj 246 490	/ 100;
lec19_3.08\1.delay-inverse.pd	/	#X obj 211 339	/ 100;
lec19_3.08\1.delay-inverse.pd	+~	#X obj 111 237	+~;
lec19_3.08\1.delay-inverse.pd	+~	#X obj 160 491	+~;
lec19_3.08\1.delay-inverse.pd	+~	#X obj 112 284	+~;
lec19_3.08\1.delay-inverse.pd	+~	#X obj 159 439	+~;
lec19_3.08\1.delay-inverse.pd	adc~	#X obj 51 172	adc~;

lec19_3.08\1.delay-inverse.pd	delread~	#X obj 208 462	delread~ del1 200;
lec19_3.08\1.delay-inverse.pd	delread~	#X obj 173 296	delread~ del2 200;
lec19_3.08\1.delay-inverse.pd	delwrite~	#X obj 206 436	delwrite~ del1 10000;
lec19_3.08\1.delay-inverse.pd	delwrite~	#X obj 171 270	delwrite~ del2 10000;
lec19_3.08\1.delay-inverse.pd	noise~	#X obj 180 158	noise~;
lec19_3.08\1.delay-inverse.pd	osc~	#X obj 111 158	osc~ 500;
lec19_3.08\1.delay-inverse.pd	output~	#X obj 161 533	output~;
lec19_3.08\1.delay-inverse.pd	output~	#X obj 43 357	output~;
lec19_3.08\1.delay-inverse.pd	tgl	#X obj 86 203	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec19_3.08\1.delay-inverse.pd	tgl	#X obj 145 204	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 0
lec19_3.08\1.delay-inverse.pd	tgl	#X obj 214 206	tgl 15 0 empty empty empty 17 7 0 10 -262144 -1 -1 1
lec19_3.08\2.gem.intro.pd	colorRGB	#X obj 179 164	colorRGB;
lec19_3.08\2.gem.intro.pd	colorRGB	#X obj 339 168	colorRGB;
lec19_3.08\2.gem.intro.pd	gemhead	#X obj 179 119	gemhead;
lec19_3.08\2.gem.intro.pd	gemhead	#X obj 339 123	gemhead;
lec19_3.08\2.gem.intro.pd	gemwin	#X obj 36 240	gemwin;
lec19_3.08\2.gem.intro.pd	pix_image	#X obj 177 309	pix_image;
lec19_3.08\2.gem.intro.pd	pix_texture	#X obj 179 333	pix_texture;
lec19_3.08\2.gem.intro.pd	rectangle	#X obj 180 385	rectangle 1 2;
lec19_3.08\2.gem.intro.pd	rectangle	#X obj 337 385	rectangle 1 2;
lec19_3.08\2.gem.intro.pd	rotateXYZ	#X obj 177 259	rotateXYZ;
lec19_3.08\2.gem.intro.pd	rotateXYZ	#X obj 337 263	rotateXYZ;
lec19_3.08\2.gem.intro.pd	translateXYZ	#X obj 181 212	translateXYZ;
lec19_3.08\2.gem.intro.pd	translateXYZ	#X obj 341 216	translateXYZ;
lec19_3.08\output~.pd	*~	#X obj 64 242	*~;
lec19_3.08\output~.pd	*~	#X obj 154 241	*~;
lec19_3.08\output~.pd	bng	#X obj 350 240	bng 15 250 50 0 empty empty mute -38 7 0 12 -262144
lec19_3.08\output~.pd	dac~	#X obj 64 272	dac~;
lec19_3.08\output~.pd	dbtorms	#X obj 29 97	dbtorms;

lec19_3.08\output~.pd	f	#X obj 353 437	f;
lec19_3.08\output~.pd	f	#X obj 353 515	f;
lec19_3.08\output~.pd	hip~	#X obj 85 192	hip~ 3;
lec19_3.08\output~.pd	hip~	#X obj 147 192	hip~ 3;
lec19_3.08\output~.pd	inlet~	#X obj 85 170	inlet~;
lec19_3.08\output~.pd	inlet~	#X obj 148 170	inlet~;
lec19_3.08\output~.pd	line~	#X obj 29 170	line~;
lec19_3.08\output~.pd	moses	#X obj 353 467	moses 1;
lec19_3.08\output~.pd	moses	#X obj 433 447	moses 1;
lec19_3.08\output~.pd	pack	#X obj 29 127	pack 0 50;
lec19_3.08\output~.pd	r	#X obj 323 174	r \\${0}-master-lvl;
lec19_3.08\output~.pd	r	#X obj 29 71	r \\${0}-master-out;
lec19_3.08\output~.pd	r	#X obj 433 418	r \\${0}-master-out;
lec19_3.08\output~.pd	s	#X obj 353 541	s \\${0}-master-lvl;
lec19_3.08\output~.pd	s	#X obj 323 279	s \\${0}-master-out;
lec19_3.08\output~.pd	t	#X obj 353 490	t b;
lec19_3.08\output~.pd	t	#X obj 467 486	t b f;
lec20_3.10\0.bird.pd	0	#X obj 361 279	0;
lec20_3.10\0.bird.pd	l	#X obj 315 277	l;
lec20_3.10\0.bird.pd	-	#X obj 588 81	- 0.5;
lec20_3.10\0.bird.pd	-	#X obj 633 92	- 0.5;
lec20_3.10\0.bird.pd	-	#X obj 71 125	- 30;
lec20_3.10\0.bird.pd	*	#X obj 195 263	* -1;
lec20_3.10\0.bird.pd	*	#X obj 746 268	* -1;
lec20_3.10\0.bird.pd	*	#X obj 632 68	* -1;
lec20_3.10\0.bird.pd	*~	#X obj 400 174	*~;
lec20_3.10\0.bird.pd	/	#X obj 179 206	/ 50;
lec20_3.10\0.bird.pd	+~	#X obj 401 196	+~;
lec20_3.10\0.bird.pd	<	#X obj 358 228	< 50;

lec20_3.10\0.bird.pd	>	#X obj 322 226	> 65;
lec20_3.10\0.bird.pd	adc~	#X obj 400 79	adc~;
lec20_3.10\0.bird.pd	bng	#X obj 313 140	bng 15 250 50 0 empty empty empty 0 -6 0 8 -262144 -1
lec20_3.10\0.bird.pd	bng	#X obj 318 320	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec20_3.10\0.bird.pd	bng	#X obj 357 316	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec20_3.10\0.bird.pd	colorRGB	#X obj 285 251	colorRGB 0.6 0.3 0.3;
lec20_3.10\0.bird.pd	colorRGB	#X obj 478 145	colorRGB 0.9 0.9 0.5;
lec20_3.10\0.bird.pd	colorRGB	#X obj 704 140	colorRGB 0.9 0.9 0.5;
lec20_3.10\0.bird.pd	colorRGB	#X obj 43 97	colorRGB 1 1 1;
lec20_3.10\0.bird.pd	colorRGB	#X obj 435 69	colorRGB 1 1 1;
lec20_3.10\0.bird.pd	colorRGB	#X obj 699 106	colorRGB 0.6 0.6 0.6;
lec20_3.10\0.bird.pd	colorRGB	#X obj 73 314	colorRGB 0.6 0.9 0.9;
lec20_3.10\0.bird.pd	dbtorms	#X obj 416 149	dbtorms;
lec20_3.10\0.bird.pd	env~	#X obj 76 63	env~ 4096;
lec20_3.10\0.bird.pd	expr	#X obj 169 236	expr 0.1+0.5*\$f1*\$f1;
lec20_3.10\0.bird.pd	expr	#X obj 24 180	expr \$f1*\$f1*0.0005;
lec20_3.10\0.bird.pd	f	#X obj 301 129	f;
lec20_3.10\0.bird.pd	gemhead	#X obj 284 228	gemhead;
lec20_3.10\0.bird.pd	gemhead	#X obj 477 122	gemhead -10;
lec20_3.10\0.bird.pd	gemhead	#X obj 703 117	gemhead -10;
lec20_3.10\0.bird.pd	gemhead	#X obj 44 66	gemhead;
lec20_3.10\0.bird.pd	gemhead	#X obj 436 38	gemhead;
lec20_3.10\0.bird.pd	gemhead	#X obj 700 76	gemhead;
lec20_3.10\0.bird.pd	gemhead	#X obj 72 291	gemhead;
lec20_3.10\0.bird.pd	gemwin	#X obj 61 70	gemwin;
lec20_3.10\0.bird.pd	hip~	#X obj 399 103	hip~ 3;
lec20_3.10\0.bird.pd	inlet~	#X obj 108 79	inlet~;
lec20_3.10\0.bird.pd	loadbang	#X obj 140 22	loadbang;
lec20_3.10\0.bird.pd	loadbang	#X obj 420 279	loadbang;

lec20_3.10\0.bird.pd	loadbang	#X obj 624 210	loadbang;
lec20_3.10\0.bird.pd	loadbang	#X obj 850 205	loadbang;
lec20_3.10\0.bird.pd	loadbang	#X obj 122 282	loadbang;
lec20_3.10\0.bird.pd	loadbang	#X obj 211 16	loadbang;
lec20_3.10\0.bird.pd	loadbang	#X obj 412 286	loadbang;
lec20_3.10\0.bird.pd	loadbang	#X obj 662 39	loadbang;
lec20_3.10\0.bird.pd	loadbang	#X obj 841 43	loadbang;
lec20_3.10\0.bird.pd	loadbang	#X obj 403 129	loadbang;
lec20_3.10\0.bird.pd	loadbang	#X obj 208 342	loadbang;
lec20_3.10\0.bird.pd	loadbang	#X obj 35 219	loadbang;
lec20_3.10\0.bird.pd	max	#X obj 68 149	max 0;
lec20_3.10\0.bird.pd	metro	#X obj 315 116	metro 200;
lec20_3.10\0.bird.pd	pack	#X obj 189 290	pack 0 -0.1 0;
lec20_3.10\0.bird.pd	pack	#X obj 479 287	pack 0 -0.1 0;
lec20_3.10\0.bird.pd	pack	#X obj 844 321	pack 0 0 0.2;
lec20_3.10\0.bird.pd	pack	#X obj 747 293	pack 0 -0.1 0;
lec20_3.10\0.bird.pd	pack	#X obj 694 315	pack 0 -0.1 0;
lec20_3.10\0.bird.pd	pack	#X obj 287 322	pack 0 0 0.2;
lec20_3.10\0.bird.pd	pack	#X obj 576 315	pack 0 0 0.2;
lec20_3.10\0.bird.pd	pack	#X obj 319 167	pack;
lec20_3.10\0.bird.pd	polygon	#X obj 284 372	polygon 4;
lec20_3.10\0.bird.pd	polygon	#X obj 484 397	polygon 6;
lec20_3.10\0.bird.pd	polygon	#X obj 710 392	polygon 6;
lec20_3.10\0.bird.pd	polygon	#X obj 140 362	polygon 3;
lec20_3.10\0.bird.pd	polygon	#X obj 393 357	polygon 3;
lec20_3.10\0.bird.pd	polygon	#X obj 661 363	polygon 3;
lec20_3.10\0.bird.pd	polygon	#X obj 72 435	polygon 4;
lec20_3.10\0.bird.pd	r	#X obj 61 41	r gemwin;
lec20_3.10\0.bird.pd	r	#X obj 587 55	r h;

lec20_3.10\0.bird.pd	r	#X obj 255 181	r w;
lec20_3.10\0.bird.pd	r~	#X obj 77 40	r~ audio-in;
lec20_3.10\0.bird.pd	random	#X obj 184 175	random 50;
lec20_3.10\0.bird.pd	rect10	#X obj 6 118	rect10 array1 array2 20;
lec20_3.10\0.bird.pd	rect10	#X obj 6 139	rect10 array1 array2 30;
lec20_3.10\0.bird.pd	rect10	#X obj 6 161	rect10 array1 array2 40;
lec20_3.10\0.bird.pd	rect10	#X obj 8 94	rect10 array1 array2 10;
lec20_3.10\0.bird.pd	rect10	#X obj 5 185	rect10 array1 array2 50;
lec20_3.10\0.bird.pd	rect10	#X obj 7 207	rect10 array1 array2 60;
lec20_3.10\0.bird.pd	rect10	#X obj 7 230	rect10 array1 array2 70;
lec20_3.10\0.bird.pd	rect10	#X obj 7 249	rect10 array1 array2 80;
lec20_3.10\0.bird.pd	rect10	#X obj 5 270	rect10 array1 array2 90;
lec20_3.10\0.bird.pd	route	#X obj 319 191	route 0 1;
lec20_3.10\0.bird.pd	s	#X obj 313 165	s doit;
lec20_3.10\0.bird.pd	s	#X obj 69 257	s h;
lec20_3.10\0.bird.pd	s	#X obj 201 299	s w;
lec20_3.10\0.bird.pd	s~	#X obj 403 258	s~ audio-in;
lec20_3.10\0.bird.pd	sel	#X obj 316 254	sel 1;
lec20_3.10\0.bird.pd	sel	#X obj 360 256	sel 1;
lec20_3.10\0.bird.pd	t	#X obj 287 296	t b f;
lec20_3.10\0.bird.pd	t	#X obj 577 289	t b f;
lec20_3.10\0.bird.pd	t	#X obj 845 295	t b f;
lec20_3.10\0.bird.pd	t	#X obj 301 106	t b f;
lec20_3.10\0.bird.pd	tgl	#X obj 315 94	tgl 15 0 empty empty empty 0 -6 0 8 -262144 -1 -1 0 1
lec20_3.10\0.bird.pd	translateXYZ	#X obj 480 175	translateXYZ 1.73 1.62 0;
lec20_3.10\0.bird.pd	translateXYZ	#X obj 706 170	translateXYZ lec11_2.08 1.62 0;
lec20_3.10\0.bird.pd	translateXYZ	#X obj 40 129	translateXYZ 1.95 1.56 0;
lec20_3.10\0.bird.pd	translateXYZ	#X obj 431 164	translateXYZ 1.95 1.56 0;
lec20_3.10\0.bird.pd	translateXYZ	#X obj 700 170	translateXYZ 1.95 1.56 0;

lec20_3.10\1.glorious.mess.pd	*	#X obj 20 172	* 0.5;
lec20_3.10\1.glorious.mess.pd	*~	#X obj 125 313	*~;
lec20_3.10\1.glorious.mess.pd	*~	#X obj 400 132	*~ 0.03;
lec20_3.10\1.glorious.mess.pd	*~	#X obj 36 259	*~;
lec20_3.10\1.glorious.mess.pd	+~	#X obj 126 260	+~ 0.2;
lec20_3.10\1.glorious.mess.pd	+~	#X obj 50 288	+~;
lec20_3.10\1.glorious.mess.pd	adc~	#X obj 114 112	adc~;
lec20_3.10\1.glorious.mess.pd	adc~	#X obj 399 111	adc~;
lec20_3.10\1.glorious.mess.pd	adc~	#X obj 607 255	adc~;
lec20_3.10\1.glorious.mess.pd	bng	#X obj 399 191	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec20_3.10\1.glorious.mess.pd	bng	#X obj 397 348	bng 15 250 50 0 empty empty empty 17 7 0 10 -262144
lec20_3.10\1.glorious.mess.pd	bonk~	#X obj 397 168	bonk~;
lec20_3.10\1.glorious.mess.pd	cos~	#X obj 126 284	cos~;
lec20_3.10\1.glorious.mess.pd	dbtorms	#X obj 190 193	dbtorms;
lec20_3.10\1.glorious.mess.pd	env~	#X obj 608 279	env~ 512;
lec20_3.10\1.glorious.mess.pd	line~	#X obj 181 309	line~;
lec20_3.10\1.glorious.mess.pd	metro	#X obj 396 324	metro;
lec20_3.10\1.glorious.mess.pd	moses	#X obj 124 186	moses 20;
lec20_3.10\1.glorious.mess.pd	mtof	#X obj 125 161	mtof;
lec20_3.10\1.glorious.mess.pd	osc~	#X obj 125 238	osc~;
lec20_3.10\1.glorious.mess.pd	osc~	#X obj 20 214	osc~;
lec20_3.10\1.glorious.mess.pd	output~	#X obj 121 338	output~;
lec20_3.10\1.glorious.mess.pd	output~	#X obj 396 403	output~;
lec20_3.10\1.glorious.mess.pd	output~	#X obj 15 322	output~;
lec20_3.10\1.glorious.mess.pd	pack	#X obj 175 279	pack 0 12;
lec20_3.10\1.glorious.mess.pd	sigmund~	#X obj 124 135	sigmund~;
lec20_3.10\1.glorious.mess.pd	t	#X obj 402 214	t b b;
lec20_3.10\1.glorious.mess.pd	t	#X obj 384 281	t b f;
lec20_3.10\1.glorious.mess.pd	table	#X obj 458 353	table foo 441000;

lec20_3.10\1.glorious.mess.pd	tabplay~	#X obj 396 378	tabplay~ foo;
lec20_3.10\1.glorious.mess.pd	tabwrite~	#X obj 448 209	tabwrite~ foo;
lec20_3.10\1.glorious.mess.pd	timer	#X obj 403 241	timer;
lec20_3.10\1.glorious.mess.pd	vsl	#X obj 608 307	vsl 15 128 0 127 0 0 empty empty empty 0 -9 0 10 -262144
lec20_3.10\2.record.pd	adc~	#X obj 104 107	adc~;
lec20_3.10\2.record.pd	writesf~	#X obj 103 194	writesf~;
lec20_3.10\output~.pd	*~	#X obj 64 242	*~;
lec20_3.10\output~.pd	*~	#X obj 154 241	*~;
lec20_3.10\output~.pd	bng	#X obj 350 240	bng 15 250 50 0 empty empty mute -38 7 0 12 -262144
lec20_3.10\output~.pd	dac~	#X obj 64 272	dac~;
lec20_3.10\output~.pd	dbtorms	#X obj 29 97	dbtorms;
lec20_3.10\output~.pd	f	#X obj 353 437	f;
lec20_3.10\output~.pd	f	#X obj 353 515	f;
lec20_3.10\output~.pd	hip~	#X obj 85 192	hip~ 3;
lec20_3.10\output~.pd	hip~	#X obj 147 192	hip~ 3;
lec20_3.10\output~.pd	inlet~	#X obj 85 170	inlet~;
lec20_3.10\output~.pd	inlet~	#X obj 148 170	inlet~;
lec20_3.10\output~.pd	line~	#X obj 29 170	line~;
lec20_3.10\output~.pd	moses	#X obj 353 467	moses 1;
lec20_3.10\output~.pd	moses	#X obj 433 447	moses 1;
lec20_3.10\output~.pd	pack	#X obj 29 127	pack 0 50;
lec20_3.10\output~.pd	r	#X obj 323 174	r \\${0}-master-lvl;
lec20_3.10\output~.pd	r	#X obj 29 71	r \\${0}-master-out;
lec20_3.10\output~.pd	r	#X obj 433 418	r \\${0}-master-out;
lec20_3.10\output~.pd	s	#X obj 353 541	s \\${0}-master-lvl;
lec20_3.10\output~.pd	s	#X obj 323 279	s \\${0}-master-out;
lec20_3.10\output~.pd	t	#X obj 353 490	t b;
lec20_3.10\output~.pd	t	#X obj 467 486	t b f;

lec20_3.10\rect.pd	-	#X obj 220 171	- 50;
lec20_3.10\rect.pd	-	#X obj 164 164	- 50;
lec20_3.10\rect.pd	*	#X obj 220 192	* 0.05;
lec20_3.10\rect.pd	*	#X obj 164 185	* 0.05;
lec20_3.10\rect.pd	+	#X obj 200 90	+
lec20_3.10\rect.pd	+	#X obj 389 109	+ 1;
lec20_3.10\rect.pd	+	#X obj 219 150	+ 2;
lec20_3.10\rect.pd	colorRGB	#X obj 77 102	colorRGB 0 0 0;
lec20_3.10\rect.pd	f	#X obj 198 64	f \$3;
lec20_3.10\rect.pd	f	#X obj 229 90	f \$4;
lec20_3.10\rect.pd	gemhead	#X obj 72 59	gemhead;
lec20_3.10\rect.pd	pack	#X obj 168 226	pack 0 0 0;
lec20_3.10\rect.pd	pack	#X obj 250 227	pack 0 0 0;
lec20_3.10\rect.pd	pack	#X obj 333 228	pack 0 0 0;
lec20_3.10\rect.pd	pack	#X obj 415 229	pack 0 0 0;
lec20_3.10\rect.pd	polygon	#X obj 304 268	polygon 4;
lec20_3.10\rect.pd	r	#X obj 224 19	r doit;
lec20_3.10\rect.pd	t	#X obj 221 42	t b b;
lec20_3.10\rect.pd	t	#X obj 390 131	t f f;
lec20_3.10\rect.pd	t	#X obj 200 119	t f f f f f;
lec20_3.10\rect.pd	tabread	#X obj 262 159	tabread \$1;
lec20_3.10\rect.pd	tabread	#X obj 338 159	tabread \$2;
lec20_3.10\rect.pd	tabread	#X obj 414 160	tabread \$1;
lec20_3.10\rect.pd	tabread	#X obj 490 160	tabread \$2;
lec20_3.10\rect10.pd	rect	#X obj 82 61	rect \$1 \$2 \$3 0;
lec20_3.10\rect10.pd	rect	#X obj 83 88	rect \$1 \$2 \$3 1;
lec20_3.10\rect10.pd	rect	#X obj 82 112	rect \$1 \$2 \$3 2;
lec20_3.10\rect10.pd	rect	#X obj 82 139	rect \$1 \$2 \$3 3;
lec20_3.10\rect10.pd	rect	#X obj 84 164	rect \$1 \$2 \$3 4;

lec20_3.10\rect10.pd	rect	#X obj 85 191	rect \$1 \$2 \$3 5;
lec20_3.10\rect10.pd	rect	#X obj 84 215	rect \$1 \$2 \$3 6;
lec20_3.10\rect10.pd	rect	#X obj 84 244	rect \$1 \$2 \$3 7;
lec20_3.10\rect10.pd	rect	#X obj 83 269	rect \$1 \$2 \$3 8;
lec20_3.10\rect10.pd	rect	#X obj 83 298	rect \$1 \$2 \$3 9;