

```

0  'LEMMINGS.SOURCE
1  PC= 1 : 'POINTER COLOR
2  TE= 25 : 'TIME TO EXPLOSION
3  NS=8*2 : 'NUMBER OF STEPS BUILT
4  FD= 25 : 'LEMMING SAFE FALL DISTANCE
5  NU= 5 : 'NUMBER OF LEVELS
6  SL= 0 : 'START LEVEL
7  ER= 15 : 'LEMMING ENTER RATE
8  NL= 25 : 'NUMBER OF LEMMINGS (MAX 100)
9  GOTO50
49 -----
50  SET40960,49151:WRT0:OPZ1,0:WRITE"00:LEMMINGS,P,W":BAS2049:PASS1
51  BYT11,8,0,0,158,50,48,54,49,0,0,0:JMP+START
59 -----
60  ←LEMMING
61  BYT0,1,0,1,3,1,0,2,0,0,1,0, 0,1,0,1,2,1,0,2,0,0,1,0,0,1,0
62  BYT0,1,0,0,2,1,1,2,0,0,0,1, 0,1,0,1,2,0,0,2,1,1,0,0,1,0,0
63  BYT0,1,0,0,1,0,0,2,0,0,1,0, 0,1,1,0,2,2,0,0,2,0,0,2,0,0,1,0
64  BYT0,0,1,0,0,2,0,2,2,1,0,1, 1,1,0,2,2,0,0,2,0,0,1,0,0,1,0,0
65  BYT1,0,0,2,0,0,2,2,0,1,0,1, 0,1,0,1,2,0,0,2,0,0,1,0,0,1,0
66  BYT0,1,0,0,2,1,0,2,0,0,1,0, 0,0,1,0,0,2,0,0,2,0,0,2,0,0,1,0
67  BYT0,1,0,0,2,2,1,0,0,2,0,0,1, 1,0,0,2,0,0,2,0,0,2,0,0,1,0,0
68  BYT0,1,0,2,2,0,2,0,1,1,0,0, 0,0,0,0,1,0,0,2,1,1,1,0,0,1,0
69  BYT0,0,0,0,1,0,1,2,0,0,1,1, 0,1,0,1,2,1,0,2,0,1,0,1,0,1,0
70  BYT0,1,0,1,2,1,0,2,0,0,1,0
79 -----
109 ←POKE SEI:LDX#52:STX1:LDA3:AND#127:STA3:LDX3:LDY4:LDA+YPOSL,Y:STA5
110 LDA+YPOS, Y:STA6:LDA+XOFFSET,X:TAY:TXA:AND#3:TAX:STX2:LDA8:CPX#3:BEQ+POEND
111 CPX#2:BEQ+PO2:CPX#1:BEQ+PO1:TAX:LDA+PT0,X:JMP+POEND:←PO1 TAX:LDA+PT1,X
112 JMP+POEND:←PO2 TAX:LDA+PT2,X:←POEND:LDX2:STA2:LDA(5),Y:AND+EXC,X:ORA2
113 STA(5),Y:LDX#54:STX1:CLI:RTS:←EXC BYT63,207,243,252:←PT2 BYT0,4,8,12
114 ←PT1 BYT0,16,32,48:←PT0 BYT0,64,128,192
129 -----
130 ←YPOSL:FORZ=1T08:BYT 32,33,34,35,36,37,38,39,96,97,98,99,100,101,102,103
131 BYT 160,161,162,163,164,165,166,167,224,225,226,227,228,229,230,231:NEXTZ
132 ←YPOS, Y:FORZ=224+0T0224+3:BUF8,Z:NEXTZ:FORZ=224+5T0224+8:BUF8,Z:NEXTZ
133 FORZ=224+10T0224+13:BUF8,Z:NEXTZ:FORZ=224+15T0224+18:BUF8,Z:NEXTZ
134 FORZ=224+20T0224+23:BUF8,Z:NEXTZ:FORZ=224+25T0224+28:BUF8,Z:NEXTZ
135 FORZ=224+0T0224+3:BUF8,Z:NEXTZ:FORZ=224+5T0224+8:BUF8,Z:NEXTZ:←XOFFSET
136 FORZ=0T0248STEP8:BUF4,Z:NEXTZ
149 -----
150 ←LOOP JSR+MOVEALL:LDA836:CLC:ADC837:CMP#0:BEQ+LOOP0:CMP825:BNE+LOOP0:INC838
151 LDA838:CMP#ER*2:BNE+LOOP0:JMP+ENDLEVEL:←LOOP0:JSR65508:CMP#95:BNE+LOOP1

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152 JMP+END : ←LOOP1 CMP#78 : BNE+LOOP2 : JSR+NUKE : JMP+LOOP4 : ←LOOP2 CMP#80 : BNE+LOOP4
153 LDA#0 : STA54296 : ←LOOP3 JSR65508 : BEQ+LOOP3 : LDA#15 : STA54296 : ←LOOP4 LDA832
154 BNE+LOOP5 : INC824 : LDA824 : CMP#ER : BNE+LOOP5 : LDA#0 : STA824 : LDA825 : CMP#NL
155 BEQ+LOOP5 : LDX825 : LDA#34 : STA41160,X : INC825 : ←LOOP5 JMP+LOOP
156 :
157 ←END LDA#165 : STA816 : LDA#244 : STA817 : LDA#55 : STA1 : LDA#5 : STA631 : LDA#1 : STA198
158 BRK
159 :
160 ←NUKE LDA825 : BEQ+NUKE1 : LDA832 : BNE+NUKE1 : LDA#4 : STA839 : INC832 : LDX#0
161 ←NUKE0 LDA41160,X : ORA#64 : STA41160,X : INX : CPX825 : BNE+NUKE0 : ←NUKE1 RTS
162 -----
163 ←DRAWLEM LDA822 : AND#7 : CMP#0 : BNE+DRL2 : LDX#0 : ←DRL1 NOP : NOP : NOP : INX : CPX#128
164 BNE+DRL1 : RTS : ←DRL2 LDA820 : AND#127 : STA820 : LDA822 : AND#7 : CMP#1 : BNE+DRL3
165 LDA#0 : JMP+DRLSTART : ←DRL3 CMP#2 : BEQ+DRL4 : CMP#5 : BNE+DRL3A : JMP+ANMINER
166 ←DRL3A CMP#3 : BNE+DRL3B : JMP+AMBASHER : ←DRL3B CMP#6 : BNE+DRL3C : JMP+ANBUILDER
167 ←DRL3C CMP#4 : BNE+DRL3D : JMP+ANDIGGER : ←DRL3D JMP+ANFALL : ←DRL4
168 LDX823 : LDA41460,X : BEQ+DRL5 : JMP+ANFALL : ←DRL5 LDA854 : CMP#1 : BNE+DRL6
169 LDA#48 : JMP+DRLSTART : ←DRL6 LDA822 : AND#32 : BNE+DRL7 : LDA#24 : JMP+DRLSTART
170 ←DRL7 LDA#36 : JMP+DRLSTART : ←DRLSTART LDX823 : STA41660,X : STA7
171 LDA#0 : STA9 : ←DRL LDX7 : LDA+LEMMING,X : CMP#0 : BEQ+DREND
172 STA8 : LDX9 : LDA820 : CLC : ADC+LEMOFFX,X : STA3 : LDA821 : CLC : ADC+LEMOFFY,X : STA4
173 JSR+POKE : ←DREND INC7 : INC9 : LDA9 : CMP#12 : BNE+DRL : JMP+DRAWUMB
174 ←ANMINER LDA822 : AND#32 : BNE+ANM1 : LDA#60 : JMP+ANM2 : ←ANM1 LDA#84
175 ←ANM2 LDX829 : CPX#2 : BEQ+ANM3 : CPX#3 : BEQ+ANM3 : CLC : ADC#12 : ←ANM3 JMP+DRLSTART
176 ←AMBASHER LDA#108 : LDX829 : CPX#0 : BEQ+ANB : CPX#1 : BEQ+ANB : LDA#120
177 ←ANB JMP+DRLSTART
178 ←ANBUILDER LDA822 : AND#32 : BNE+ANU1 : LDA#144 : JMP+ANU2 : ←ANU1 LDA#168 : ←ANU2
179 LDX855 : CPX#0 : BEQ+ANU3 : CPX#1 : BEQ+ANU3 : CPX#2 : BEQ+ANU3 : CLC : SBC#11 : ←ANU3
180 JMP+DRLSTART
181 ←ANDIGGER LDX#180 : LDA855 : AND#4 : BEQ+AND : LDX#192 : ←AND TXA : JMP+DRLSTART
182 ←ANFALL LDA#204 : LDX854 : CPX#0 : BEQ+ANF : LDA#216 : ←ANF JMP+DRLSTART
183 :
184 ←DRAWUMB LDA822 : AND#16 : BNE+DUMB1 : RTS : ←DUMB1 LDX823 : LDA41460,X : CMP#9
185 BPL+DUMB2 : RTS : ←DUMB2 LDA#0 : STA9 : ←DUMB3 LDX9 : LDA820 : SEC : SBC+UMBX,X : STA3 : INC3
186 INC3 : LDA821 : SEC : SBC+UMBY,X : STA4 : JSR+PEEK : CMP#3 : BEQ+DUMB4 : LDX9 : LDA+UMBS,X
187 STA8 : JSR+POKE : ←DUMB4 INC9 : LDA9 : CMP#5 : BNE+DUMB3 : RTS
188 :
189 ←UMBX BYT1,2,1,0,1 : ←UMBY BYT3,2,2,2,1 : ←UMBS BYT1,1,1,1,2
190 :
191 ←LEMOFFX BYT 0,1,2,0,1,2,0,1,2,0,1,2 : ←LEMOFFY BYT 0,0,0,1,1,1,2,2,2,3,3,3
192 -----
193 ←ERASELEM LDA822 : AND#7 : CMP#0 : BNE+ERL2 : LDX#0 : ←ERL1 NOP : NOP : NOP : INX : CPX#128
194 BNE+ERL1 : RTS : ←ERL2 LDA820 : AND#127 : STA820 : LDX823 : LDA41660,X : STA7
195 LDA#0 : STA8 : STA9 : ←ERL LDX7 : LDA+LEMMING,X : CMP#0 : BEQ+ERLEND

203 LDX9:LDA820:CLC:ADC←LEMOFFX,X:STA3:LDA821:CLC:ADC←LEMOFFY,X:STA4:JSR+POKE
204 ←ERLEND INC7:INC9:LDA9:CMP#12:BNE←ERL:JMP←ERASUMB
205 :
206 ←ERASUMB LDA822:AND#16:BNE←EUMB1:RTS:←EUMB1 LDX823:LDA41468,X:CMP#9
207 BPL←EUMB2:RTS:←EUMB2 LDA#0:STA9:←EUMB3 LDX9:LDA820:SEC:SBC←UMBX,X:STA3:INC3
208 INC3:LDA821:SEC:SBC←UMBY,X:STA4:JSR+PEEK:CMP#3:BEQ←EUMB4:LDA#0:STA8
209 JSR+POKE:←EUMB4 INC9:LDA9:CMP#5:BNE←EUMB3:RTS
210 -----
211 ←SETUPSCREEN LDA#0:STA3:LDA#224:STA4:LDA#255:LDX#0:LDY#0:←FS1 STA(3),Y:INY
212 CPY#0:BNE←FS1:INC4:INX:CPX#31:BNE←FS1:←FS2 STA(3),Y:INY:CPY#192:BNE←FS2:RTS
213 -----
214 ←COLORWINDOW LDA#4:STA3:LDA#216:STA4:LDX#0:←CW2 LDY#0:←CW3 LDA850:STA(3) Y
215 INY:CPY#32:BNE←CW3:LDA3:CLC:ADCH#0:STA3:LDA4:ADCH#0:STA4:INX:CPX#16:BNE←CW2
216 RTS
217 -----
218 ←PEEK SEI:LDX#52:STX1:LDA3:AND#127:STA3:LDX3:LDY4:LDA+YPOS,L,Y:STA5
219 LDA+YPOSH,Y:STA6:LDA+XOFFSET,X:TAY:TXA:AND#3:TAX:LDA(5),Y:AND+MASK,X:LDX#0
220 ←PEEK1 CMP←SEARCH1,X:BEQ←PEEK2:INX:CPX#13:BNE←PEEK1:LDX#0:←PEEK2
221 LDA+SEARCH2,X:LDX#54:STX1:CLI:CMP#3:RTS:←MASK BYT192,48,12,3:←SEARCH1
222 BYT0,3,12,48,192,1,2,4,8,16,32,64,128:←SEARCH2 BYT0,3,3,3,1,2,1,2,1,2,1,2
223 -----
224 ←MOVELEM LDA822:AND#7:CMP#0:BEQ←MOULE:LDA820:CMP#45:BNE←MOU:LDA821:CMP#46
225 BNE←MOU:LDA#0:STA822:INC837:LDA#4:STA831:RTS
226 ←MOU LDA821:CMP#124:BMI+MOULE:LDA#0:STA822:INC836:RTS:←FALL OFF SCREEN
227 ←MOULE LDA822:AND#64:BEQ←MU:JSR+EXPLODE:←MU LDA822:AND#7:CMP#0:BEQ←ENDM
228 CMP#1:BNE←MU0:JSR+FALLDOWN
229 ←ENDM RTS:←MU0 CMP#4:BNE+MU00:JMP+DIG:←MU00 CMP#5:BNE+MU000:JMP+DIG
230 ←MU000 LDA822:AND#128:BEQ←MU00A:JMP+CLIMB
231 ←MU00A JSR+FALLDOWN:CMP#0:BNE←MU2:LDA822:AND#7:CMP#6:BNE+MUU1
232 LDA855:BEQ←MUU0:RTS:←MUU0 JSR+BUILD
233 ←MUU1 LDA822:AND#32:BEQ←MU1:JMP+MOVER:←MU1 JMP+MOVEL:←MU2 RTS
234 ←DIG LDA820:STA3:LDA821:CLC:ADCH#4:STA4:JSR+PEEK:BEQ+DIG0:INC3:JSR+PEEK
235 BEQ+DIG0:INC3:JSR+PEEK:BEQ+DIG0:LDA822:AND#248:ORA#2:STA822:JSR+FALLDOWN
236 RTS:←DIG0 LDA829:CMP#0:BEQ+DIG00:RTS:←DIG00 INC821:LDA822:AND#7:CMP#5
237 BEQ+DIG1:JMP+DIG4:←DIG1 LDA822:AND#32:BNE+DIG2:DEC820:LDA820:STA3:JMP+DIG3
238 ←DIG2 INC820:LDA820:CLC:ADCH#2:STA3:←DIG3 LDA821:STA4:LDA#0:STA8:FORZ=1T03
239 JSR+POKE:INC4:NEXTZ:JSR+POKE:LDA820:STA3:LDA821:CLC:SBC#0:STA4:JSR+POKE
240 INC3:JSR+POKE:INC3:JSR+POKE:←DIG4 LDA820:STA3:LDA821:CLC:ADCH#3
241 STA4:LDA#0:STA8:JSR+POKE:INC3:JSR+POKE:INC3:JSR+POKE:RTS
242 :
243 ←MOVEL LDA820:CLC:SBC#0:STA3:LDA821:STA4:JSR+PEEK:BEQ+TURNR:INC4:JSR+PEEK
244 BEQ+TURNR:JMP+MOVEL0:←TURNR JMP+TURNRIGHT:←MOVEL0 INC4:JSR+PEEK
245 BNE+MOVEL1:LDA821:CLC:SBC#1:STA4:JSR+PEEK:BEQ+TURNR:INC3:JSR+PEEK:BEQ+TURNR
246 INC3:JSR+PEEK:BEQ+TURNR:INC4:JSR+PEEK:BEQ+TURNR:DEC3:JSR+PEEK:BEQ+TURNR

264 DEC3 : JSR+PEEK : BEQ+TURNR : JSR+LEFTR : DEC821 : DEC821 : RTS : +MOVE11 INC4 : JSR+PEEK
265 BNE+MOVE12 : LDA821 : CLC : SBCH0 : STA4 : JSR+PEEK : BEQ+TURNR : INC3 : JSR+PEEK : BEQ+TURNR
266 INC3 : JSR+PEEK : BEQ+TURNR : JSR+LEFTR : DEC821 : JMP+LLL : +MOVE12 JSR+LEFTR : RTS
267 +LEFTR DEC820 : LDA822 : AND#7 : CMP#3 : BNE+LEFTR1 : LDA822 : AND#248 : ORA#2 : STA822
268 +LEFTR1 LDA822 : AND#127 : STA822 : RTS
269 :
270 +MOVE1 LDA820 : CLC : ADC#3 : STA3 : LDA821 : STA4 : JSR+PEEK : BEQ+TURNL : INC4 : JSR+PEEK
271 BEQ+TURNL : JMP+MOVE0 : +TURNL JMP+TURNLEFT : +MOVE0 INC4 : JSR+PEEK
272 BNE+MOVE1 : LDA821 : CLC : SBCH1 : STA4 : JSR+PEEK : BEQ+TURNL : DEC3 : JSR+PEEK : BEQ+TURNL
273 DEC3 : JSR+PEEK : BEQ+TURNL : INC4 : JSR+PEEK : BEQ+TURNL : INC3 : JSR+PEEK : BEQ+TURNL
274 INC3 : JSR+PEEK : BEQ+TURNL : JSR+RIGHTR : DEC821 : DEC821 : RTS : +MOVE1 INC4 : JSR+PEEK
275 BNE+MOVE2 : LDA821 : CLC : SBCH0 : STA4 : JSR+PEEK : BEQ+TURNL : DEC3 : JSR+PEEK : BEQ+TURNL
276 DEC3 : JSR+PEEK : BEQ+TURNL : JSR+RIGHTR : DEC821 : JMP+RRR : +MOVE2 JSR+RIGHTR : RTS
277 +RIGHTR INC820 : LDA822 : AND#7 : CMP#3 : BNE+RIGHTR1 : LDA822 : AND#248 : ORA#2 : STA822
278 +RIGHTR1 LDA822 : AND#127 : STA822 : RTS
279 :
280 +EXPLODE LDA822 : AND#7 : CMP#0 : BNE+EXPL : RTS : +EXPL LDX823 : INC41260, X
281 LDA41260, X : CMP#TE : BEQ+EXP1 : RTS : +EXP1 INC41560, X : INC836 : LDA#0 : STA822 : STA7
282 STA8 : LDA835 : BNE+EXP2
283 LDA#5 : STA835 : +EXP2 LDX7 : LDA820 : CLC : SBCH2 : CLC : ADC+EXPX, X : STA3 : LDA821
284 CLC : SBCH2 : CLC : ADC+EXPY, X : AND#127 : STA4 : JSR+POKE : INC7 : LDA7 : CMP#66 : BNE+EXP2
285 RTS
286 :
287 +EXPX BYT3,4,5,2,3,4,5,6,1,2,3,4,5,6,7 : BUF36, 0,1,2,3,4,5,6,7,8
288 BYT1,2,3,4,5,6,7,2,3,4,5,6,3,4,5
289 +EXPY BUF3,0 : BUF5,1 : BUF7,2 : FORZ=3TO6 : BUF9, Z : NEXTZ : BUF7,7 : BUF5,8 : BUF3,9
290 :-----
291 +LLL LDA822 : AND#7 : CMP#6 : BNE+LLL1 : LDA820 : CLC : SBCH0 : STA3 : LDA821 : CLC : ADC#2
292 STA4 : LDA#3 : STA8 : JSR+POKE : +LLL1 RTS
293 :-----
294 +RRR LDA822 : AND#7 : CMP#6 : BNE+RRR1 : LDA820 : CLC : ADC#3 : STA3 : LDA821 : CLC : ADC#2
295 STA4 : LDA#3 : STA8 : JSR+POKE : +RRR1 RTS
296 :-----
297 +CLIMB LDA834 : CMP#0 : BEQ+CLI : RTS
298 +CLI LDA820 : STA3 : LDA821 : CLC : SBCH0 : STA4 : JSR+PEEK : BEQ+CLIM : INC3 : JSR+PEEK
299 BEQ+CLIM : INC3 : JSR+PEEK : BEQ+CLIM : DEC821 : LDA822 : AND#248 : ORA#2 : STA822
300 LDA822 : AND#32 : BEQ+CLIM0 : JMP+MOVE : +CLIM0 JMP+MOVE
301 +CLIM LDA822 : AND#127 : STA822 : LDA822 : AND#32 : BEQ+CLIM1 : LDA822 : AND#223 : STA822
302 RTS : +CLIM1 LDA822 : ORA#32 : STA822 : RTS
303 :-----
304 +BUILD LDX823 : INC41360, X : LDA41360, X : CMP#NS : BNE+BUILD1 : LDA822 : AND#248
305 ORA#2 : STA822 : +BUILD1 LDA822 : AND#32 : BNE+BUILD
306 +BUILD1 LDA820 : CLC : SBCH1 : STA3 : LDA821 : CLC : ADC#2 : STA4 : LDA#3 : STA8
307 JSR+POKE : INC4 : JSR+POKE : DEC3 : DEC4 : JSR+POKE : RTS

354 ←BUILD R LDA820 : CLC : ADC#4 : STA3 : LDA821 : CLC : ADC#2 : STA4 : LDA#3 : STA8
355 JSR←POKE : INC4 : JSR←POKE : INC3 : DEC4 : JSR←POKE : RTS
359
360 ←TURNRIGHT LDA822 : AND#7 : CMP#3 : BEQ←BASHL : LDA822 : AND#8 : BNE←CLIMBL
361 LDA822 : ORA#32 : STA822 : LDA822 : AND#7 : CMP#6 : BEQ←TUR : RTS
362 ←TUR LDA822 : AND#248 : ORA#2 : STA822 : RTS
363 ←BASHL LDA829 : CMP#0 : BEQ←BAL : RTS : ←BAL DEC820 : LDA820 : STA3
364 LDA821 : STA4 : LDA#0 : STA8 : JSR←POKE : INC4 : JSR←POKE : INC4 : JSR←POKE : INC4 : JSR←POKE
365 RTS : ←CLIMBL LDA822 : ORA#128 : STA822 : RTS
369
370 ←TURNLEFT LDA822 : AND#7 : CMP#3 : BEQ←BASHR : LDA822 : AND#8 : BNE←CLIMBR
371 LDA822 : AND#223 : STA822 : LDA822 : AND#7 : CMP#6 : BEQ←TUL : RTS
372 ←TUL LDA822 : AND#248 : ORA#2 : STA822 : RTS
373 ←BASHR LDA829 : CMP#0 : BEQ←BAR : RTS : ←BAR INC820 : LDA820 : CLC : ADC#2 : STA3
374 LDA821 : STA4 : LDA#0 : STA8 : JSR←POKE : INC4 : JSR←POKE : INC4 : JSR←POKE : INC4 : JSR←POKE
375 RTS : ←CLIMBR LDA822 : ORA#128 : STA822 : RTS
399
400 ←FALL
401 LDA820 : STA3 : LDA821 : CLC : ADC#4 : STA4 : JSR←PEEK : BEQ←ENDF : INC3 : JSR←PEEK : BEQ←ENDF
402 INC3 : JSR←PEEK : BEQ←ENDF : INC821 : LDX823 : LDA41460, X : CMP#FD : BEQ←FA1 : INC41460, X
403 ←FA1 LDA#1 : RTS
404 :
405 ←ENDF LDA822 : AND#7 : CMP#0 : BNE←ENDF1 : RTS : ←ENDF1 LDA822 : AND#16 : BNE←FA2 : LDX823
406 LDA41460, X : CMP#FD : BNE←FA2 : LDA#0 : STA822 : INC41560, X : INC836 : LDA#3 : STA851
407 INC820 : RTS : ←FA2 LDX823 : LDA#0 : STA41460, X : LDA#0 : RTS
409
410 ←FALLDOWN LDA822 : AND#16 : BEQ←FALD : JSR←FALL : LDX823 : LDA41460, X : CMP#9 : BPL←FALD0
411 JSR←FALL : JSR←FALL : ←FALD0 RTS : ←FALD FORZ=1TO3 : JSR←FALL : NEXTZ : RTS
419
420 ←SETUPLEM LDX#0 : ←SL1 LDA843 : STA40960, X : LDA844 : STA41060, X : LDAH32 : STA41160, X
421 LDA#0 : STA41260, X : STA41360, X : STA41460, X : LDA#255 : STA41560, X : LDA#12 : STA41660, X
422 INX : CPX#NL : BNE←SL1 : LDA#0 : STA824 : STA825 : STA829 : STA831 : STA832 : STA834 : STA835
423 STA836 : STA837 : STA838 : STA839 : STA851 : STA854 : STA855 : RTS
429
430 ←MOVEALL INC854 : LDA854 : CMP#2 : BNE←MOVEALL0 : LDA#0 : STA854 : ←MOVEALL0 INC855
431 LDA855 : CMP#8 : BNE←MOVEALL1 : LDA#0 : STA855 : ←MOVEALL1 INC829 : LDA829 : CMP#4
432 BNE←MA0 : LDA#0 : STA829 : ←MA0 INC834 : LDA834 : CMP#2 : BNE←MA0 : LDA#0 : STA834
433 : ←MA0 : LDA#0 : STA823 : ←MA1 LDX823 : LDA40960, X : STA820 : LDA41060, X : STA821
434 LDA41160, X : STA822 : JSR←ERASELEM : JSR←MOVELEM : JSR←DRAWLEM : JSR←DEBRIS
435 JSR←PUSHBUTTON : JSR←SOUNDS : INC827 : LDA827 : CMP841 : BNE←MA2 : LDA#0 : STA827
436 JSR←MOVEPOINTER : ←MA2 LDX823 : LDA820 : STA40960, X : LDA821 : STA41060, X : LDA822
437 STA41160, X : INC823 : LDA823 : CMP#NL : BNE←MA1 : RTS
439
440 ←SETUPSprites LDA#0 : STA826 : STA827 : STA830 : STA840 : LDA#4 : STA841


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511 LDA#822:AND#248:ORA#4:STA#822:LDA#4:STA#839: $\leftarrow$ F22 RTS: $\leftarrow$ F3 CMP#3:BNE $\leftarrow$ F4:LDX#823
512 LDA#41460,X:BNE $\leftarrow$ F33:LDA#822:AND#248:ORA#5:STA#822:LDA#4:STA#839: $\leftarrow$ F33 RTS
513  $\leftarrow$ F4 CMP#4:BNE $\leftarrow$ F5:LDA#822:AND#7:CMP#6:BEQ $\leftarrow$ F44:LDX#823:LDA#41460,X:BNE $\leftarrow$ F44
514 LDA#822:AND#248:ORA#6:STA#822:LDA#0:STA#41360,X:LDA#4:STA#839: $\leftarrow$ F44 RTS
515  $\leftarrow$ F5 CMP#5:BNE $\leftarrow$ F6:LDA#822:AND#8:BNE $\leftarrow$ F7:LDA#822:ORA#8:STA#822:LDA#4:STA#839:RTS
516  $\leftarrow$ F6 CMP#6:BNE $\leftarrow$ F7:LDA#822:AND#16:BNE $\leftarrow$ F7:LDA#822:ORA#16:STA#822:LDA#4:STA#839:RTS
517  $\leftarrow$ F7 RTS
518 :
550  $\leftarrow$ SELMOD LDA#826:CMP#49:BPL $\leftarrow$ SM1:RTS: $\leftarrow$ SM1 CLC:SBCH#48:TAX
551 LDA $\leftarrow$ MODEP,X:CMP#8:BNE $\leftarrow$ SM2:RTS: $\leftarrow$ SM2 CMP#828:BNE $\leftarrow$ SM3:RTS
552  $\leftarrow$ SM3 STA#7:TAX:LDA $\leftarrow$ MOD,X:STA#255:LDA#47:AND#255:BNE $\leftarrow$ SM4:RTS
553  $\leftarrow$ SM4 LDX#828:LDA#7:STA#828:STX#255:JSR $\leftarrow$ DRAWICON
554 LDA#828:STA#255:JSR $\leftarrow$ DRAWICON:RTS
555 :
560  $\leftarrow$ MODEP:FORZ=0T07:BUF9,Z:BYT8:NEXTZ
561  $\leftarrow$ MOD BYT1,2,4,8,16,32,64,128
599 :
600  $\leftarrow$ DRAWICON
601 LDA#(ID-INT(ID/256)*256):STA#251:LDA#(INT(ID/256)):STA#252:LDA#255:BEQ $\leftarrow$ DI00
602 LDX#0: $\leftarrow$ DI0 LDA#251:CLC:ADC#81:STA#251:LDA#252:ADC#0:STA#252:INX:CPX#255:BNE $\leftarrow$ DI0
603  $\leftarrow$ DI00 LDX#255:LDA $\leftarrow$ ICONP,X:STA#253:LDA#128:STA#254
604 LDA#0:STA#7: $\leftarrow$ DI1 LDY#7:LDA#(251),Y:STA#8:JSR $\leftarrow$ REVERSE
605 LDA#253:CLC:ADC $\leftarrow$ ICONX,Y:STA#3:LDA#254:CLC:ADC $\leftarrow$ ICONY,Y:STA#4:JSR $\leftarrow$ POKE:INC#7:LDA#7
606 CMP#81:BNE $\leftarrow$ DI1:RTS
607 :
610  $\leftarrow$ ICONX BUF81,0,1,2,3,4,5,6,7,8: $\leftarrow$ ICONY FORZ=0T08:BUF9,Z:NEXTZ
611 :
612 A=10: $\leftarrow$ ICONP FORZ=49T049+8*A-ASTEP:A:BYTZ:NEXTZ
613 :
614  $\leftarrow$ REVERSE LDA#255:CMP#828:BEQ $\leftarrow$ REV1:RTS: $\leftarrow$ REV1 LDA#8:BEQ $\leftarrow$ REV2:DEC#8:RTS
615  $\leftarrow$ REV2 INC#8:RTS
616 :
620  $\leftarrow$ ICOND BYT3,3,3,3,3,3,3,3,3,3,1,1,3,3,1,3,3,3,3,1,3,1,3,1,3,3,3
621 BYT3,1,3,1,3,1,3,3,3,3,1,1,3,3,1,3,3,3,3,1,3,1,3,1,3,3,3
622 BYT3,1,3,1,3,1,3,3,3,3,1,1,3,3,1,1,3,3,3,3,3,3,3,3,3,3
623 :
624 BYT3,3,3,3,3,3,3,3,3,3,1,1,3,3,3,1,3,3,3,1,3,1,3,1,3,1,3
625 BYT3,1,3,1,3,1,3,1,3,3,1,1,3,3,1,1,3,3,3,1,3,1,3,1,3,1,3
626 BYT3,1,3,1,3,1,3,1,3,3,1,1,3,3,1,1,3,3,3,3,3,3,3,3,3,3,3
627 :
628 BYT3,3,3,3,3,3,3,3,3,3,3,1,1,3,3,1,1,1,3,3,1,3,1,3,3,1,3,3
629 BYT3,1,3,1,3,3,1,3,3,3,1,1,3,3,1,3,3,1,3,1,3,3,1,3,3,1,3,3
630 BYT3,1,3,1,3,3,1,3,3,3,1,1,3,3,1,1,1,3,3,1,3,3,3,3,3,3,3,3,3
631 :

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760 ADC+DPH2, X:STA3:LDX823:STA42060,X:JSR+PEEK:LDX823:STA42860,X
761 LDA823:STA9
762 LDX823:LDA41760,X:STA3:LDA42160,X:STA4:AND#128:BNE+DEB2:LDA3:AND#128
763 BNE+DEB1:LDA42560,X:JSR+DEBR:+DEB1 LDX823:LDA41860,X:STA3:AND#128:BNE+DEB2
764 LDA42660,X:JSR+DEBR:+DEB2 LDX823:LDA41960,X:STA3:LDA42360,X:STA4:AND#128
765 BNE+DEB4:LDA3:AND#128:BNE+DEB3:LDA42760,X:JSR+DEBR:+DEB3 LDX823:LDA42060,X
766 STA3:AND#128:BNE+DEB4:LDA42860,X:JSR+DEBR:+DEB4 RTS:+DEBR CMP#1:BEQ+DEBRI
767 CMP#2:BEQ+DEBRI:LDX9:LDA57344,X:AND#1:CLC:ADC#1:STA8:JSR+POKE:LDX9
768 LDA57344,X:CLC:ADC9:STA9:+DEBRI RTS
769 +ERASD LDX823:LDA41760,X:STA3:LDA42160,X:STA4:AND#128:BNE+ERA2:LDA3:AND#128
770 BNE+ERA1:LDA42560,X:JSR+ERAR:+ERA1 LDX823:LDA41860,X:STA3:AND#128:BNE+ERA2
771 LDA42660,X:JSR+ERAR:+ERA2 LDX823:LDA41960,X:STA3:LDA42360,X:STA4:AND#128
772 BNE+ERA4:LDA3:AND#128:BNE+ERA3:LDA42760,X:JSR+ERAR:+ERA3 LDX823:LDA42060,X
773 STA3:AND#128:BNE+ERA4:LDA42860,X:JSR+ERAR:+ERA4 RTS
774 +ERAR STA8:CMP#1:BEQ+ERARI:CMP#2:BEQ+ERARI:JSR+POKE:+ERARI RTS
775 +DPV1 BYT1,7,10,11,12,12,11,10,7,1,251,245,239,227,215,203,191,179,167,155
776 +DPH1 BYT0,4,4,8,8,12,12,16,16,18,20,22,24,25,26,27,28,29,30,31
777 +DPV2 BYT1,4,7,10,13,16,22,28,34,40,52,64,76,88,100,112,124,124,124,124
778 +DPH2 BYT0,2,2,4,4,6,6,8,9,10,11,11,12,12,12,12,13,13,13
779
780 +SETUPSOUND LDA#0:LDX#0:+SETS STA54272,X:INX:CPX#25:BNE+SETS:LDA#15
781 STA54296:LDA#240:STA54278:LDA#240:STA54285:RTS
799
800 +SOUNDS LDA835:BEQ+S01END:TAX:LDA56324:AND#3:CLC:ADC+DATS01,X
801 STA54273:LDA#17:STA54276:DEC835:LDA835:CMP#0:BNE+S01END
802 LDA#0:STA54276:JMP+S01END
803 +DATS01 BYT20,30,50,30,20,20
804:
805 +S01END LDA839:BEQ+S02END
806 LDA#40:STA54280:LDA#17:STA54283:DEC839:LDA839:CMP#0:BNE+S02END
807 LDA#0:STA54283:JMP+S02END
808:
810 +S02END LDA831:BEQ+S03END:TAX:LDA56324:AND#1:CLC:ADC+DATS03,X
811 STA54273:LDA#17:STA54276:DEC831:LDA831:CMP#0:BNE+S03END
812 LDA#0:STA54276:JMP+S03END
813 +DATS03 BYT0,50,40,35,20
814:
815 +S03END LDA851:BEQ+S04END:TAX:LDA56324:AND#7:CLC:ADC+DATS04,X
816 STA54273:LDA#17:STA54276:DEC851:LDA851:CMP#0:BNE+S04END
817 LDA#0:STA54276:JMP+S04END
818 +DATS04 BYT0,25,35,20
819:
820 +S04END RTS
849

850 ←OPENTRAP FORZ=1T05:JSR←PAUSE:NEXTZ:INC51200+1018:JSR←PAUSE:INC51200+1018
851 RTS
852 ←PAUSE LDX#0:←OT1 LDY#0:←OT2 INY:CPY#0:BNE←OT2:INX:CPX#60:BNE←OT1:RTS
853
854 -----
855 ←FN BYT"LEM LEU ****":A=←FN
856 ←LOADSCREEN LDAH3:LDX#8:LDY#0:JSR65466
857 LDAH11:LDX#(A-INT(A/256)*256):LDY#(INT(A/256)):JSR65469
858 LDAH0:LDX#32:LDY#57344/256:JSR65493:RTS
859
860 -----
861 ←START LDA53266:BNE←START:LDA#54:STA1:LDAH0:STA157:LDAH0:STA53269:LDAH63
862 STA56578:LDAH151:STA56576:LDAH21:STA53272:LDAH200:STA53270:LDAH27:STA53265
863 LDAH0:STA53280:STA53281:LDAH4:STA648:LDAH1:STA646:LDAH147:JSR65490
864 JSR←SETUPSOUND:LDAHSL:STA842
865
866 -----
867 ←RESTART JSR←SETUPLEVEL:JSR←SETUPSCREEN:JSR←LOADSCREEN:JSR←SETUPMODE
868 JSR←SETUPLEM:JSR←TEXT:JSR←WAITMESSAGE:LDAH11:STA53265:JSR←SETUPSPRITES
869 JSR←COLORSCREEN:JSR←COLORWINDOW
870 JSR←TURNONBITMAP:JSR←OPENTRAP:LDAH0:STA198:JMP←LOOP
871
872 -----
873 ←TURNONBITMAP
874 LDAH63:STA56578:LDAH196:STA56576:LDAH32+8:STA53272:LDAH216:STA53270
875 LDAH59:STA53265:LDA848:STA53280:LDA849:STA53281:RTS
876
877 -----
878 ←SETUPMODE LDAH0:STA828:LDA842:CMP#0:BNE←SUM:LDAH8:STA828:RTS
879 ←SUM JSR←DRAWTITLE:LDAH0:STA255:←MOL1 LDX255:LDA←MOD,X:STA7:LDA847:AND7
880 BEQ←MOL2:JSR←DRAWICON:←MOL2 INC255:LDA255:CMP#8:BNE←MOL1:RTS
881
882 -----
883 ←COLORSCREEN LDX#0:←COS LDAH30:STA51200,X:STA51200+256,X:STA51200+512,X
884 STA51200+744,X:LDA848:STA55296,X
885 STA55296+256,X:STA55296+512,X:STA55296+744,X:INX:BNE←COS:RTS
886
887 -----
888 ←WAITMESSAGE LDA842:CMP#0:BNE←WAITM:RTS:←WAITM LDX#0:←WM1 LDA←WMD,X:BEQ←WM2
889 JSR65490:INX:JMP←WM1:←WM2 LDAH0:STA198:←WM3 LDA56320:ANDH16:BEQ←WM4
890 JSR65508:CMP#95:BEQ←WM5:JMP←WM3:←WM4 LDAH147:JSR65490:RTS
891 ←WM5 LDAH165:STA816:LDAH244:STA817:LDAH55:STA1:LDAH5:STA631:LDAH1:STA198
892 BRK
893
894 -----
895 ←WMD BYT"SUBMISSION LEVEL PRESS JOYSTICK BUTTON TO CONTINUE",0
896
897 -----
898 ←TEXT LDA842:CMP#0:BNE←TEX:RTS:←TEX LDX#0:←TEX1 LDA←TEXTD,X:BEQ←TEXEND
899 CMP#133:BEQ←TEX2:CMP#134:BEQ←TEX3:JSR65490:INX:JMP←TEX1:←TEXEND RTS
900 ←TEX2 LDA842:STA2:JSR←PRINTNUMBER:INX:JMP←TEX1
901 ←TEX3 LDA853:STA2:JSR←PRINTNUMBER:INX:JMP←TEX1
902 ←TEXEND BYT"END OF SUBMISSION LEVEL ■",13

995 BYT"NUMBER OF LEMMINGS: 25",13,"GOAL: %",13
996 BYT"SETTING: TRICKY",0
999
1000 ←SETUPLEVEL
1001 LDX#42:LDA←STARTX,X:STA#843:LDA←STARTY,X:STA#844
1002 LDA←ENDX,X:STA#845:LDA←ENDY,X:STA#846
1003 LDA←FN#0,X:STA←FN+8:LDA←FN1,X:STA←FN+9:LDA←FN2,X:STA←FN+10
1004 LDA←ENABLEMODE,X:STA#847:LDA←BORDERC,X:STA#848:LDA←BACKGC,X:STA#849
1005 LDA←WALLC,X:STA#850:LDA←GOALN,X:STA#853:RTS
1006:
1007 ←STARTX BYT15,23,55,45,25,10
1008 ←STARTY BYT25,20,22,12,2,7
1009 ←ENDX BYT5,60,112,103,4,63
1010 ←ENDY BYT75,109,115,118,124,122
1011:
1012 ←FN#0 BYT"000000"
1013 ←FN#1 BYT"000000"
1014 ←FN#2 BYT"012345"
1015:
1016 ←ENABLEMODE BYT0,255,255,147,1,7
1017:
1018 ←BORDERC BYT0,0,0,0,0,0
1019 ←BACKGC BYT0,6,6,6,6,6
1020 ←WALLC BYT6,0,0,2,7,0
1021:
1022 ←GOALN BYT0,100,100,60,70,30
1099
1100 ←PRINTNUMBER LDY#2:CPY#100:BMI←PN#1:LDA#49:JSR#65490:LDA←PND#1,Y:JSR#65490
1101 JMP←PN#2:←PN#1 LDA←PND#1,Y:CM#48:BEQ←PN#2:JSR#65490:←PN#2 LDA←PND#2,Y:JSR#65490
1102 RTS
1103:
1104 ←PND#1 FORZ=48T057:BUF#10,Z:NEXTZ:BYT48
1105 ←PND#2 FORZZ=1T010:FORZ=48T057:BYTZ:NEXTZ,ZZ:BYT48
1199
1200 ←ENDLEVEL LDA#43:STA#53265:JSR←PAUSE:LDA#0:STA#53269:LDA#63:STA#56578
1201 LDA#151:STA#56576:LDA#21:STA#53272:LDA#200:STA#53270:LDA#27:STA#53265
1202 LDA#0:STA#53280:STA#53281:LDA#842:CM#0:BNE←ENL#0:INC#42:JMP←RESTART:←ENL#0
1203 LDX#0:←ENL#1 LDA←ELM#1,X:BEQ←ENL#2:CM#133:BEQ←ENL#1A:CM#134:BEQ←ENL#1B
1204 JSR#65490:INX:JMP←ENL#1:←ENL#1A LDY#837:LDA←PERCENT,Y:STA#2:JSR←PRINTNUMBER
1205 INX:JMP←ENL#1:←ENL#1B LDA#853:STA#2:JSR←PRINTNUMBER:INX:JMP←ENL#1
1206 ←ENL#2 JSR←WAITMESSAGE
1207 LDA#842:CM#NU:BNE←ENL#3:LDA#1:STA#842:JMP←RESTART:←ENL#3 INC#42:JMP←RESTART
1208:
1209 ←ELM#1 BYT"EXXXXXXXXXXXXXXXXXXXXXXXLEMMINGS OUT: %",13

1210 BYT"YOU NEEDED: %",0
1211 ←PERCENT FORZ=0TO100STEP4:BYTZ:NEXTZ
1997 -----
1998 PASS2:END
1999 -----
2000 SAVE"00:LEMMINGS.SOURCE",0:END