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1 'Jonathan Duke
2 'Project #7
3 ' ($STAMP BS2)
4 ' ($PBASIC 2.5)
5 counter VAR Word
6 counter1 VAR Word
7 rright VAR Nib
8 lleft VAR Nib
9 Green PIN 15
10 Yellow PIN 14
11 Red PIN 13
12 Right PIN 10
13 Left PIN 9
14
15
16 LOW Red
17 LOW Yellow
18 LOW Green
19
20 Right = 0
21 Left = 0
22 OUTL = %00000000
23 DIRL = %11111111
24
25 DO
26 GOSUB Main
27 LOOP
28
29 Main:
30 DO
31 FOR counter = 0 TO 65535
32 GOSUB Lzero
33 GOSUB Rzero
34 IF IN12=1 THEN
35 FOR counter = 0 TO 62
36 GOSUB Lzero
37 GOSUB Rzero
38 NEXT
39 GOSUB Start
40 ENDIF
41 NEXT
42 LOOP
43
44 Start:
45 DO
46 FOR counter = 0 TO 62
47 IF counter = 61 THEN
48 rright=rright+1
49 IF rright = 10 THEN rright=0
50 ENDIF
51 IF IN11=1 THEN
52 PAUSE 200
53 GOSUB weeset
54 ENDIF
55 IF IN12=1 THEN
56 PAUSE 200
57 GOSUB paws
58 ENDIF
59 GOSUB Leftcycle
60 GOSUB Rightcycle
61 NEXT
62 IF rright = 9 THEN
63 lleft=lleft+1
64 IF lleft = 6 THEN
65 lleft = 0
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66 counter1 = counter1 + 1
67 IF counter1 = 4 THEN counter1=0
68 GOSUB LEDcontrol
69 ENDIF
70 ENDIF
71 LOOP
72
73 LeftCycle:
74 IF lleft = 0 THEN GOSUB Lzero
75 IF lleft = 1 THEN GOSUB Lone
76 IF lleft = 2 THEN GOSUB Ltwo
77 IF lleft = 3 THEN GOSUB Lthree
78 IF lleft = 4 THEN GOSUB Lfour
79 IF lleft = 5 THEN GOSUB Lfive
80 RETURN
81
82
83 RightCycle:
84 IF rright = 0 THEN GOSUB Rone
85 IF rright = 1 THEN GOSUB Rtwo
86 IF rright = 2 THEN GOSUB Rthree
87 IF rright = 3 THEN GOSUB Rfour
88 IF rright = 4 THEN GOSUB Rfive
89 IF rright = 5 THEN GOSUB Rsix
90 IF rright = 6 THEN GOSUB Rseven
91 IF rright = 7 THEN GOSUB Reight
92 IF rright = 8 THEN GOSUB Rnine
93 IF rright = 9 THEN GOSUB Rzero
94 RETURN
95
96 LEDcontrol:
97 IF counter1=1 THEN
98   LOW Red
99   LOW Yellow
100  HIGH Green
101 ENDIF
102 IF counter1=2 THEN
103  LOW Red
104  HIGH Yellow
105  LOW Green
106 ENDIF
107 IF counter1=3 THEN
108  HIGH Red
109  LOW Yellow
110  LOW Green
111 ENDIF
112 RETURN
113
114 weeset:
115 LOW Red
116 LOW Yellow
117 LOW Green
118 counter1=0
119 DO
120   FOR counter = 0 TO 65535
121     GOSUB Lzero
122     GOSUB Rzero
123     IF IN12=1 THEN
124       rright=0
125       lleft=0
126     FOR counter = 0 TO 38
127       GOSUB Lzero
128       GOSUB Rzero
129     NEXT
130   GOSUB Start
```

```
131 ENDIF
132 NEXT
133 LOOP
134
135 paws:
136 DO
137   FOR counter = 0 TO 700
138     IF rright = 0 THEN GOSUB Rone
139     IF rright = 1 THEN GOSUB Rtwo
140     IF rright = 2 THEN GOSUB Rthree
141     IF rright = 3 THEN GOSUB Rfour
142     IF rright = 4 THEN GOSUB Rfive
143     IF rright = 5 THEN GOSUB Rsix
144     IF rright = 6 THEN GOSUB Rseven
145     IF rright = 7 THEN GOSUB Reight
146     IF rright = 8 THEN GOSUB Rnine
147     IF rright = 9 THEN GOSUB Rzero
148     IF lleft = 0 THEN GOSUB Lzero
149     IF lleft = 1 THEN GOSUB Lone
150     IF lleft = 2 THEN GOSUB Lt看
151     IF lleft = 3 THEN GOSUB Lthree
152     IF lleft = 4 THEN GOSUB Lfour
153     IF lleft = 5 THEN GOSUB Lfive
154     IF IN12=1 THEN
155       PAUSE 200
156       GOSUB LEDcontrol
157       RETURN
158     ENDIF
159     IF IN11=1 THEN GOSUB weeset
160   NEXT
161   LOW Red
162   LOW Yellow
163   LOW Green
164   LOOP
165
166   Lzero:
167     OUTL = %11111100
168     LOW Left
169     HIGH Left
170     RETURN
171
172   Lone:
173     OUTL = %01100000
174     LOW Left
175     HIGH Left
176     RETURN
177
178   Lt看:
179     OUTL = %11011010
180     LOW Left
181     HIGH Left
182     RETURN
183
184   Lthree:
185     OUTL = %11110010
186     LOW Left
187     HIGH Left
188     RETURN
189
190   Lfour:
191     OUTL = %01100110
192     LOW Left
193     HIGH Left
194     RETURN
195
```

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196 Lfive:
197 OUTL = %10110110
198 LOW Left
199 HIGH Left
200 RETURN
201
202 Rzero:
203 OUTL = %111111100
204 LOW Right
205 HIGH Right
206 RETURN
207
208 Rone:
209 OUTL = %01100000
210 LOW Right
211 HIGH Right
212 RETURN
213
214 Rtwo:
215 OUTL = %11011010
216 LOW Right
217 HIGH Right
218 RETURN
219
220 Rthree:
221 OUTL = %11110010
222 LOW Right
223 HIGH Right
224 RETURN
225
226 Rfour:
227 OUTL = %01100110
228 LOW Right
229 HIGH Right
230 RETURN
231
232 Rfive:
233 OUTL = %10110110
234 LOW Right
235 HIGH Right
236 RETURN
237
238 Rsix:
239 OUTL = %00111110
240 LOW Right
241 HIGH Right
242 RETURN
243
244 Rseven:
245 OUTL = %11100000
246 LOW Right
247 HIGH Right
248 RETURN
249
250 Reight:
251 OUTL = %11111110
252 LOW Right
253 HIGH Right
254 RETURN
255
256 Rnine:
257 OUTL = %11100110
258 LOW Right
259 HIGH Right
260 RETURN
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