

```
1 'Jonathan Duke
2 'Project #8
3 ' ($STAMP BS2)
4 ' ($PBASIC 2.5)
5 time VAR Word
6 counter VAR Word
7 billclinton VAR Word
8 paws VAR Word
9 rright VAR Nib
10 lleft VAR Nib
11 istg VAR Nib
12 Right PIN 14
13 Left PIN 15
14 DIRL = %11111111
15 rright = 0
16 lleft = 0
17
18 DO
19 GOSUB Main
20 LOOP
21
22 Main:
23 DO
24 GOSUB racecartime
25 GOSUB Leftcycle
26 GOSUB Rightcycle
27 IF lleft >=3 AND rright >=5 THEN
28 FOR counter = 0 TO 20
29 GOSUB Leftcycle
30 GOSUB Rightcycle
31 GOSUB racecartime
32 NEXT
33 FOR counter= 0 TO 20
34 GOSUB racecartime
35 NEXT
36 ENDIF
37 LOOP
38
39
40 racecartime:
41 HIGH 13
42 RCTIME 13, 1, time
43 IF time > 1500 THEN
44 rright = rright + 1
45 IF rright=10 THEN lleft=lleft+1
46 IF rright=10 THEN rright = 0
47 IF lleft = 4 AND rright = 0 THEN
48 GOSUB Servoup
49 FOR counter = 0 TO 1500
50 GOSUB LFour
51 GOSUB Rzero
52 NEXT
53 GOSUB Servodown
54 lleft=0
55 rright=0
56 GOSUB Main
57 ENDIF
58 ENDIF
59 IF time > 1500 THEN
60 DO
61 HIGH 13
62 RCTIME 13, 1, time
63 GOSUB Leftcycle
64 GOSUB Rightcycle
65 billclinton = billclinton + 1
```

```
66 IF billclinton = 500 THEN
67 billclinton = 0
68 GOSUB eightyeight
69 ENDIF
70 LOOP UNTIL time < 1500
71 ENDIF
72 RETURN
73
74 Leftcycle:
75 IF lleft = 0 THEN GOSUB Lzero
76 IF lleft = 1 THEN GOSUB Lone
77 IF lleft = 2 THEN GOSUB Ltwo
78 IF lleft = 3 THEN GOSUB Lthree
79 IF lleft = 4 THEN GOSUB Lfour
80 RETURN
81
82 Rightcycle:
83 IF rright = 0 THEN GOSUB Rzero
84 IF rright = 1 THEN GOSUB Rone
85 IF rright = 2 THEN GOSUB Rtwo
86 IF rright = 3 THEN GOSUB Rthree
87 IF rright = 4 THEN GOSUB Rfour
88 IF rright = 5 THEN GOSUB Rfive
89 IF rright = 6 THEN GOSUB Rsix
90 IF rright = 7 THEN GOSUB Rseven
91 IF rright = 8 THEN GOSUB Reight
92 IF rright = 9 THEN GOSUB Rnine
93 RETURN
94
95 eightyeight:
96 OUTL = %11111110
97 DO
98   LOW Left
99   LOW Right
100  FOR counter = 0 TO 20
101  HIGH l3
102  RCTIME l3, 1, time
103  NEXT
104  HIGH Left
105  HIGH Right
106  FOR counter = 0 TO 20
107  HIGH l3
108  RCTIME l3, 1, time
109  NEXT
110  LOOP UNTIL time < 2750
111  RETURN
112
113 Servodown:
114 FOR counter = 0 TO 20
115 PULSOUT 12, 250
116 PAUSE 20
117 GOSUB LFour
118 GOSUB Rzero
119 NEXT
120 RETURN
121
122 Servoup:
123 FOR counter = 0 TO 20
124 PULSOUT 12, 1250
125 PAUSE 20
126 IF lleft = 4 AND rright = 0 THEN
127 GOSUB Lfour
128 GOSUB Rzero
129 ENDIF
130 NEXT
```

```
131 RETURN
132
133 Lzero:
134 OUTL = %11111100
135 LOW Left
136 HIGH Left
137 RETURN
138
139 Lone:
140 OUTL = %01100000
141 LOW Left
142 HIGH Left
143 RETURN
144
145 Ltwo:
146 OUTL = %11011010
147 LOW Left
148 HIGH Left
149 RETURN
150
151 Lthree:
152 OUTL = %11110010
153 LOW Left
154 HIGH Left
155 RETURN
156
157 Lfour:
158 OUTL = %01100110
159 LOW Left
160 HIGH Left
161 RETURN
162
163 Rzero:
164 OUTL = %11111100
165 LOW Right
166 HIGH Right
167 RETURN
168
169 Rone:
170 OUTL = %01100000
171 LOW Right
172 HIGH Right
173 RETURN
174
175 Rtwo:
176 OUTL = %11011010
177 LOW Right
178 HIGH Right
179 RETURN
180
181 Rthree:
182 OUTL = %11110010
183 LOW Right
184 HIGH Right
185 RETURN
186
187 Rfour:
188 OUTL = %01100110
189 LOW Right
190 HIGH Right
191 RETURN
192
193 Rfive:
194 OUTL = %10110110
195 LOW Right
```

```
196 HIGH Right
197 RETURN
198
199 Rsix:
200 OUTL = %00111110
201 LOW Right
202 HIGH Right
203 RETURN
204
205 Rseven:
206 OUTL = %11100000
207 LOW Right
208 HIGH Right
209 RETURN
210
211 Reight:
212 OUTL = %11111110
213 LOW Right
214 HIGH Right
215 RETURN
216
217 Rnine:
218 OUTL = %11100110
219 LOW Right
220 HIGH Right
221 RETURN
222
223
224
225
226
227
228
229
```