```
dirs={
1
2
        [0] = \{x = 0, y = -1\},
        [1] = \{x = 0, y = 1\},
3
        [2]=\{x=-1, y=0\},
4
        [3] = \{x = 1, y = 0\}
 5
   }
6
7
   function init()
8
        time=0
9
        count=0
10
        body={
11
            \{x=15, y=8\},\
12
            \{x=14, y=8\},\
13
            \{x=13, y=8\}
14
        }
15
        target=\{x=0,y=0\}
16
        dir=dirs[0]
17
   end
18
19
20
   function update()
        return time%10==0
21
22
   end
23
   function setTarget()
24
25
        target.x=math.random(0,29)
        target.y=math.random(0,16)
26
        for i,v in pairs(body) do
27
            if v.x==target.x and v.y==target.y then
28
                 setTarget()
29
            end
30
31
        end
   end
32
33
   function hitTarget()
34
        if head.x==target.x and head.y==target.y then
35
            return true
36
        end
37
   end
38
39
   function draw()
40
        cls(2)
41
        for i,v in pairs(body) do
42
            rect(v.x*8,v.y*8,8,8,15)
43
        end
44
        rect(target.x*8, target.y*8,8,8,6)
45
   end
46
47
   init()
48
   setTarget()
49
50
   function TIC()
51
        time=time+1
52
       head = body[#body]
53
        join = body[#body-1]
54
        tail = body[1]
55
        if update() then
56
            for i,v in pairs(body) do
57
                 if i~=#body and v.x==head.x and v.y==head.y then
58
                      trace("Total: "..count)
59
```

```
60
                    exit()
                end
61
           end
62
           table.insert(body, #body+1, {
63
                x=(head.x+dir.x) % 30,
64
                y=(head.y+dir.y) % 17
65
           })
66
           if not hitTarget() then
67
                table.remove(body,1)
68
           else
69
                setTarget()
70
                count=count+1
71
           end
72
       end
73
       local last_dir=dir
74
       if btn(0) then dir=dirs[0]
75
       elseif btn(1) then dir=dirs[1]
76
       elseif btn(2) then dir=dirs[2]
77
       elseif btn(3) then dir=dirs[3]
78
79
80
       if head.x+dir.x==join.x and head.y+dir.y==join.y then
81
           dir=last_dir
82
       end
83
       draw()
84
  end
85
```