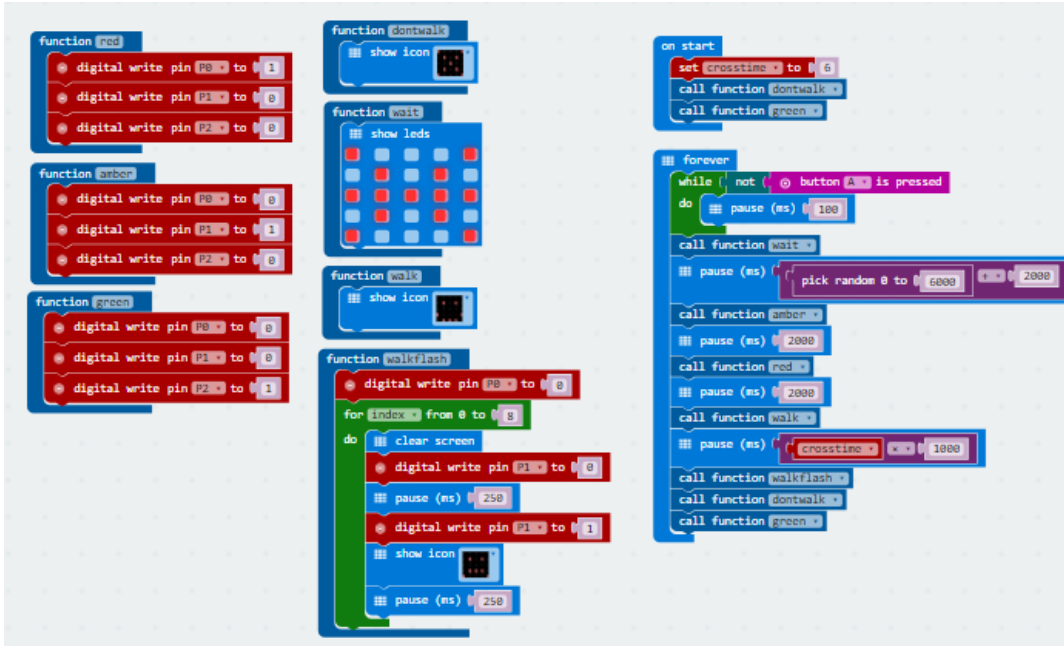


Pre-Written Program



```

function red
  digital write pin PB to 1
  digital write pin P1 to 0
  digital write pin P2 to 0

function amber
  digital write pin PB to 0
  digital write pin P1 to 1
  digital write pin P2 to 0

function green
  digital write pin PB to 0
  digital write pin P1 to 0
  digital write pin P2 to 1

function dontwalk
  show icon

function wait
  show leds

function walk
  show icon

function walkflash
  digital write pin PB to 0
  for index from 0 to 8
  do
    clear screen
    digital write pin P1 to 0
    pause (ms) 250
    digital write pin P1 to 1
    show icon
    pause (ms) 250

on start
  set crossing to 0
  call function dontwalk
  call function green

forever
  while (not button A is pressed)
  do
    pause (ms) 100
    call function wait
    pause (ms) pick random 0 to 6000 + 2000
    call function amber
    pause (ms) 2000
    call function red
    pause (ms) 2000
    call function walk
    pause (ms) crossing * 1000
    call function walkflash
    call function dontwalk
    call function green
    
```

- Go to www.microbit.org/code and open the **JavaScript Blocks Editor**.
- Drag the file **microbit-pedestrian-jsb.hex** onto the work area.
- **Download** the program onto your BBC micro:bit.

Pre-Written Program

- Go to www.microbit.org/code and open the **Python Editor**.
- Drag the file **transport.py** onto the work area.
- **Download** the program onto your BBC micro:bit.

```
1 from microbit import *
2 import random
3
4 CROSS_TIME = 6
5 RED = pin0
6 AMBER = pin1
7 GREEN = pin2
8 WAIT = Image("90009:09090:99999:09090:90009")
9
10 def lights(r,a,g):
11     RED.write_digital(r)
12     AMBER.write_digital(a)
13     GREEN.write_digital(g)
14
15 def red(): lights(1, 0, 0)
16 def amber(): lights(0, 1, 0)
17 def green(): lights(0, 0, 1)
18
19 def dont_walk():
20     display.show(Image.NO)
21
22 def wait():
23     display.show(WAIT)
24
25 def walk():
26     display.show(Image.HAPPY)
27
28 def walk_flash():
29     RED.write_digital(0)
30     for i in range(8):
31         display.clear()
32         AMBER.write_digital(0)
33         sleep(400)
34         AMBER.write_digital(1)
35         display.show(Image.SAD)
36         sleep(400)
37
38 dont_walk()
39 green()
40
41 while True:
42     while not button_a.was_pressed():
43         sleep(100)
44     wait()
45     sleep(random.randint(2000,8000))
46
47     amber()
48     sleep(2000)
49     red()
50     sleep(2000)
51
52     walk()
53     sleep(CROSS_TIME * 1000)
54
55     walk_flash()
56     dont_walk()
57     green()
58
```