

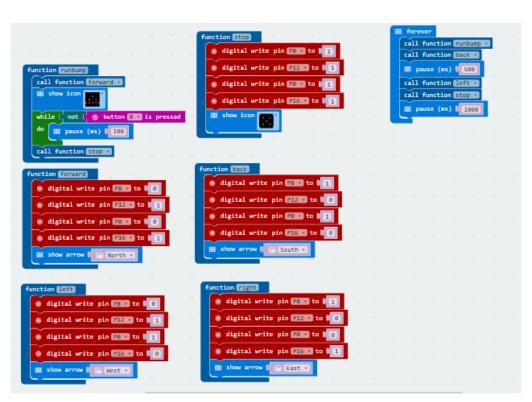
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Example Program – JavaScript Blocks Editor



- Go to www.microbit.org/code and open the JavaScript Blocks Editor.
- Drag the file microbit-robot**jsb.hex** onto the work area.
- This program acts as a simple maze solver by driving the robot forward until it hits an obstacle. It then backs off and turns left a quarter turn before repeating.
- Test it, download it and **experiment** with how it works!



























Example Program – Python Editor

```
def motors(la, lb, ra, rb):
       pin8.write_digital(la)
       pin12.write digital(lb)
       pin0.write_digital(ra)
       pin16.write digital(rb)
8
   def forward():
       motors(0,1,0,1)
11
       display.show(Image.ARROW N)
12
13 def back():
14
       motors(1,0,1,0)
       display.show(Image.ARROW_S)
16
17 def left():
18
       motors(0,1,1,0)
display.show(Image.ARROW_W)
19
20
21 def right():
       motors(1,0,0,1)
23
       display.show(Image.ARROW_E)
24
25 def stop():
       motors(1,1,1,1)
26
       display.show(Image.NO)
28
29 def run_bump():
30
31
       display.show(Image.TRIANGLE)
32
       while not button b.was pressed():
33
            sleep(100)
34
       stop()
35
```

```
37 run_bump()
38 stop()
39 sleep(250)
40 back()
41 sleep(500)
42 stop()
43 sleep(250)
44 left()
45 sleep(400)
46 stop()
47 sleep(1000)
```

- Go to <u>www.microbit.org/code</u> and open the **Python Editor.**
- Drag the file robot.py onto the work area.
- This program acts as a simple maze solver by driving the robot forward until it hits an obstacle. It then backs off and turns left a quarter turn before repeating.
- Test it, download it and experiment with how it works!











