

Micro:bit Project Sheet 23

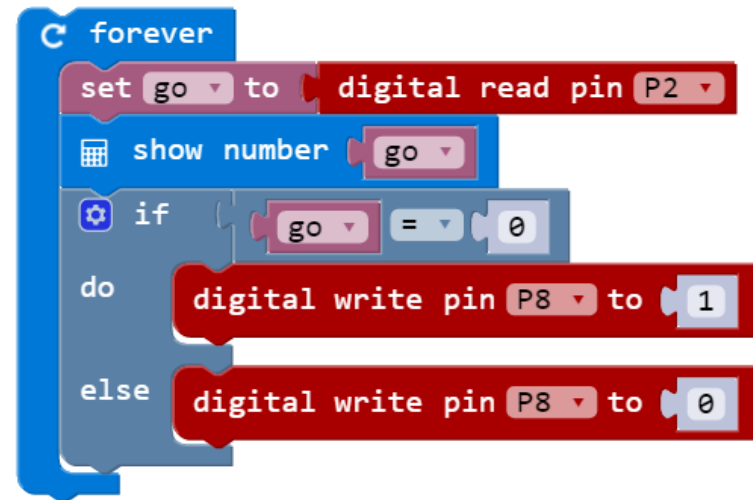
Success Criteria

- Simple single point line follower
- Demonstrate how to control a motor by using a line follower to turn on/off motor

Notes

- The code presented here is to demonstrate the simplicity of PXT.
- For this project I have used an old Maplin buggy kit with a single motor £5 and a Kitronik motor driver £12.50 and single element line follower (ebay £1.50)
- The line follower I used had a single sensor and gave a digital 1 for white and a digital 0 for black
- This project simply drive the wheels following a straight black line. Once the buggy passes the line the buggy stops. Extend this project with multiple motors and a pair of line followers to keep a buggy following a track

PXT Block Code



```
forever loop
  set go to digital read pin P2
  show number go
  if go = 0
    do
      digital write pin P8 to 1
  else
    digital write pin P8 to 0
```

The image shows a PXT block code snippet. It starts with a 'forever' loop block. Inside the loop, there is a 'set go to digital read pin P2' block, followed by a 'show number go' block. Then, there is an 'if' block with the condition 'go = 0'. The 'do' block of the 'if' contains a 'digital write pin P8 to 1' block. The 'else' block contains a 'digital write pin P8 to 0' block.

Testing

- Does pitch forward/backwards change the direction?

Notes

