

Micro:bit Programming

Algrthm

Micro:bit Programming

Sqnc

Micro:bit Programming

Rpttn

Micro:bit Programming

Slctn

Micro:bit Programming

Lp

Micro:bit Programming

whl Lp

Micro:bit Programming

Cmmnt

Micro:bit Programming

vrbl

Micro:bit Programming - sensors

MicroBits have a number of **sensors** on them.
These can be used to measure things.

Sensors work best when combined with
variables.

Micro:bit Programming - sensors

One of the sensors is the accelerometer. This can be used to warn the sailor if the boat is in danger of capsizing

```
accelerometer.get_x()
```

Micro:bit Programming - repetition

Using the **Python Editor**...

Write a program to measure the temperature

Challenges:

1. Display the temperature on a button press
2. Use a second button to display the temperature in degrees Fahrenheit
3. Round the value of the degrees F

Micro:bit Programming - sensors

```
REPEAT FOREVER
```

```
  SET reading TO accelerometer.getx()
```

```
  IF tilt is too much
```

```
    DISPLAY something
```

```
  ELSE
```

```
    DISPLAY “-”
```

Micro:bit Programming - sensors

```
REPEAT FOREVER
  SET reading TO accelerometer.getx()
  IF reading > 20:
    DISPLAY "X"
  ELSE
    DISPLAY "-"
```

Micro:bit Programming - sensors

```
REPEAT FOREVER
  SET reading TO accelerometer.getx()
  IF reading > 20:
    DISPLAY "R"
  ELSE IF reading < 20:
    DISPLAY "L"
  ELSE
    DISPLAY "-"
```

```
1 # Add your Python code here. E.g.
2 from microbit import *
3
4
5 while True:
6     reading = accelerometer.get_x()
7
8     if reading > 20:
9         display.show("R")
10
11     elif reading < -20:
12         display.show("L")
13
14     else:
15         display.show("-")
16
```