CoderDojo York   Magic 8-Ball!

Step One: Get MicroPython

On Google Chrome, search for the app 'MicroPython' in the Web Store - it's free. This will allow you to write Python scripts and upload them to the Microbit.

Step Two: Write an 8 to the screen

In the Microbit app, write the following code:

```
1.  from microbit import *
2.  import random
3.
4.  while True:
5.      display.show("8")`
```

Upload the code to the Microbit and run it. What happens when you shake the Microbit?

Step Two: Shake it!

Add the following code to what you have already written, inside the 'While True:'

```
6.      if accelerometer.was_gesture("shake"):
7.          display.clear()
8.          display.show("!")
```

Upload the code to the Microbit and run it. What happens when you shake the Microbit?

Step Three: Write some responses

We need to list our responses, and in Python we do that in an array variable. An 'array' is just a fancy word for list. Write this code before the While True:

```
1.  answers = [
2.      "Yes",
3.      "No",
4.      "Maybe",
5.      "Yes, definitely"
6.  ]
```

Step Four: Pick a random response

To make the Magic 8-Ball pick a random response, we can get it to pick a random answer using random.choice.

```
sleep(1000)
display.scroll(random.choice(answers))
```

When you shake the Microbit, this code will make the BBC microbit xwait a second and then show a random answer to the question you put to it.

Full Code

```
1.  from microbit import *
2.  import random
3.
4.  answers = ["Yes", "No", "Maybe", "Try again"]
5.
6.  while True:
7.      display.show("8")
8.      if accelerometer.was_gesture("shake"):
9.          display.clear()
10.         sleep(1000)
11.         display.scroll(random.choice(answers))
```