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# 8-Ball

```
0.00
    8-Ball Message Generator
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from microbit import *
import random
# list of possible answers
answers = [
    "It is certain",
    "It is decidedly so",
    "Cannot predict now",
    "Concentrate and ask again",
    "Don't count on it",
    "My reply is no",
    "My sources say no",
    "Outlook not so good"
    "Very doubtful",
1
while True:
    display.show("8")
    if accelerometer.was_gesture("shake"):
        display.clear()
        sleep(1000)
        # 1 pick a random item from the list.
        # 2 Convert it to a string
        # 3 scroll it.
        display.scroll(random.choice(answers))
```

### **Code Explained**

### answers List

Each of the possible messages is held in a list. A list holds multiple values. In this example, the list has 9 values and each one of those 9 values is a string (of characters).

```
answers = [
   "It is certain",
   "It is decidedly so",
   "Cannot predict now",
   "Concentrate and ask again",
   "Don't count on it"
   "My reply is no",
   "My sources say no",
   "Outlook not so good",
   "Very doubtful",
```

The square brackets and each item is separated by a comma. The list can also be arranged on a single line:

```
answers = ["It is certain", "Dont count on it", "Ask again",]
```

#### Was it Shaken?

```
if accelerometer.was_gesture("shake") is True:
```

.was\_gesture(gesture) returns a True or False depending on whether gesture was the most recently detected gesture. .was\_gesture(freefall) would return True if the microbit was thrown into the air.

The API for the accelerometer module lists other gestures that can be used.

#### **Random Choice from List**

```
display.scroll(answers.choice)
```

.choice picks a random item from the answers list.

Using random requires the random module to be imported. This is done at the beginning of the program:

```
from microbit import *
import random
```

A module (like random) is a collection of pre-existing code you can reuse.

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Make a funky 8-ball for the microbit. It shows a different message each time it's shaken.

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