

Loops in python

Introduction to loops

Loops repeat an action MANY, MANY TIMES. Example: Draw a square of 50 by 50

```
forward(50)
right(90)
forward(50)
right(90)
forward(50)
right(90)
forward(50)
right(90)
```

} repeated 4 times

We can use loops to automate

```
for i in range(4):
    forward(50)
    right(90)
```

← Note the colon

→ Note the indentation

Exercises

1. What shape will be created if the following code is run?

```
for i in range(8):
    forward(30)
    right(90)
```

A ☐

B ☐ ☐

C ☐
☐

D _____

2. What shape will be created if the following code is run?

```
for i in range(4):  
    forward(30 + i * 3)  
    right(90)
```



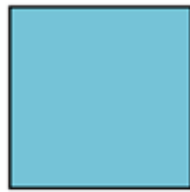
3. Draw a polygon

Polygons

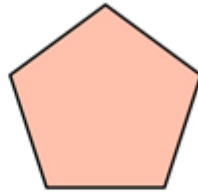
MATH
MONKS



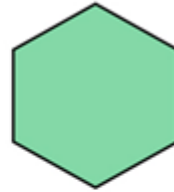
Triangle



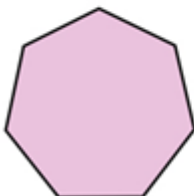
Quadrilateral



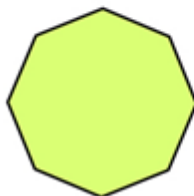
Pentagon



Hexagon



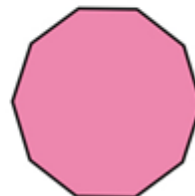
Heptagon



Octagon



Nonagon



Decagon

4. Draw a fancy shape (homework)

Create a fancy shape using basic loops