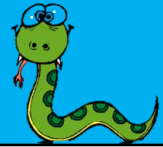




## Python – Repeating Instructions



Remember, save each program with the task number.

### Task 7 Repeating instructions

Writing out the same instructions many times is not very efficient. Use the program below to write instruction in the form of a **loop**. The code on lines 3 and 4 is indented – this is important – it tells the program that these lines are to be repeated inside the loop.

```
import turtle
for i in range(4):
    turtle.forward(100)
    turtle.right(90)
```

### Task 8

Have a look at the program below and try to work out what it will do. Think about:

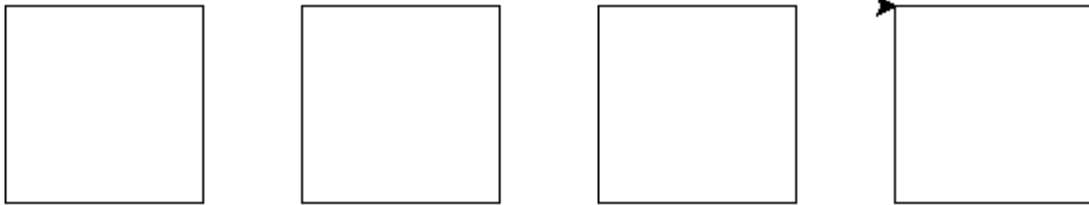
- When the turtle will be drawing and when it won't
- Which lines of code will be repeated and which won't

```
import turtle
turtle.penup()
turtle.backward(300)
turtle.pendown()
for i in range(4):
    turtle.forward(100)
    turtle.right(90)
turtle.penup()
turtle.forward(150)
turtle.pendown()
for i in range(4):
    turtle.forward(100)
    turtle.right(90)
```

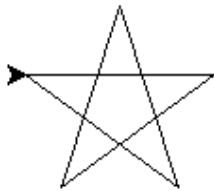
Now enter the program and run it to see if you were correct.

Write programs to draw the following patterns

### Task 9

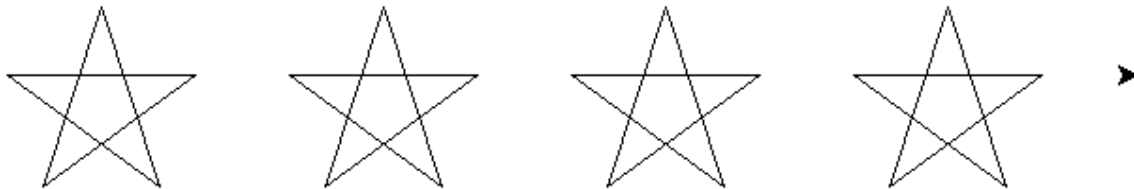


### Task 10



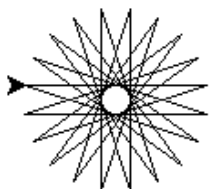
(Hint: when drawing these 5 sides, the turtle turns through  $360^\circ$  twice)

### Task 11



Extra credit for using less than 15 lines of code!

### Task 12



### Task 13

