



# CodeFirstGirls Beginners Python

## Homework: Session 2

This session:

1. User Input
2. Importing modules
3. Problem solving with Turtle
4. For Loops
5. Functions

Additional resources:

- Basic Python data-types <https://realpython.com/python-data-types/>
- Strings <https://realpython.com/python-strings/>
- String formatting (includes two common alternatives to the string formatting method covered in the session) <https://realpython.com/python-string-formatting/>
- Understanding error messages <https://realpython.com/python-traceback/>
- Variables <https://realpython.com/python-variables/>

### Question 1

Explain what this program does

```
for number in range(100):  
    output = 'o' * number  
    print(output)
```

### Question 2

Your boss really likes calculating VAT on their purchases. It is their favourite hobby. They've written this code to calculate VAT and need your help to fix it.

```
def calculate_vat(amount):  
    amount * 1.2  
  
total = calculate_vat(100)  
print(total)
```

When your boss runs the program they get the following output:

None

Your boss expects the program to output the value `120`. What is wrong? How do you fix it?

### Question 3

Using the turtle module, write a program to draw a house. The house should at least have a roof, a door and some windows. Feel free to play around with the design of your house.