#CodeYork

Assignment 2A

Summer 2017

Task 1 - Defining Functions

We will start by defining a function that squares a number and returns the result.

```
def square(n):
    return X
```

Finish off this code by replacing the X with the correct expression.

Check: *square(2)* should return 4, and *square(3)* should return 9.

Task 2 - Calling Functions

Now that you have a function that squares a number, can you use it to write another function that squares a number and adds one to it. To do this, you will need to call your *square* function from your new function.

```
def square_add(n):
    return Y + 1
```

Finish off this code by replacing the Y with the correct expression.

Check: *square_add(2)* should return 5, and *square_add(4)* should return 17.

Task 3 - Ifs and Functions

Now write a function that returns *True* if it's first parameter is greater than 10, returns False if it's less than 10, and does not return anything if it's equal to 10.

Here is the start of the code:

```
def example(n):
    if n > 10:
        return True
```

Now complete the rest of the code underneath, and check that it works.

Check: *example(12)* should return *True*, *example(8)* should return *False*, and example(10) may return *None*, or not at all (if you don't return anything, it'll be treated like None anyway).

Task 4 - All Together Now

Now modify your *example* function to instead return the number squared, rather than *True*, in the first case.

You can do this by calling your *square* function.

Check: Calling *example(12)* should now return 144 instead of *True*.