

Introduction to Python I (Exercises 04)

Functions

- 1) Write a function that receives a float number indicating the radius of a circle.

The function should calculate the area of the circle according to the following equation:

$$\text{area} = \text{PI} \times \text{radius}^2 \text{ (you can approximate Pi to 3.1415)}$$

Return the area to the calling section of the program. Test it.

- 2) Write a function that receives 3 parameters. The first parameter is a positional parameter (it is mandatory to pass the parameter, there are no default values). The other two parameters contain default values (The default values are 1 and 10 respectively).

As in:

```
def myfunction(myvalue, defvalue1 = 1, defvalue2=10):  
    totalvalue = (myvalue * defvalue2) + 1  
    return totalvalue
```

Test you function for each of the following cases:

4.1

```
myfunction(1)  
myfunction(10)  
myfunction(1,1)  
myfunction(1,1,5)  
myfunction(10,defvalue2 = 5, defvalue1=10)  
myfunction(10,defvalue2 = 5)
```

What happens in these cases?

```
myfunction(defvalue1 = 2)  
myfunction(defvalue1 = 2, defvalue2 = 10)  
myfunction()  
myfunction(1, defvalue3 = 5)
```