

## **Week 15**

### **Functions – Using parameters**

1. Modify the function that calculates the area of rectangle from Week 14 so that it uses parameters.
2. Modify the area function from Question 2 so that it returns the area. Illustrate the use of the area returned by the function in your script.
3. Modify the double function from Week14 so that it returns the doubled number. Capture its output and use it in your script.
4. Write and use a function for calculating the volume of a prism given the length, width and height. Try different ways of getting the parameters.
5. Write a function for calculating the volume of a prisms which takes two parameters: the area of the cross section and the height. The program will make use of two functions: the area function created earlier and the volume function. The area of the cross section will be calculated from the area function and the output of this function will serve as one of the parameters of the volume function. Use these functions in your script to find the volumes of several prisms.
6. Write a function for adding two numbers. Get these numbers as parameters from the user. Depending on the numbers of the parameters supplied, your function should behave as follows:
  - a. If two parameters are supplied the function prints the sum of these two numbers
  - b. If one parameter only is supplied the function prints double the value of this number
  - c. If more than two parameters are supplied or none the program prints -1

Illustrate the use of this function in your script.

7. Write a function that calculates the surface area. Modify the function so it uses parameters. Use this function in a script to capture the surface area and use it in other contexts.