CO1107 Algorithm, Data Structure & Advanced Programming - Workshop Week 1

Revision of CO1102

Task 1:

Write a function letter_counter that takes in a word and returns a tuple formed by a histogram (a set of frequencies for all the letters in the word) and the total number of letters in the word.

Task 2:

Write a function named getProduct(text) where text is a string showing the product of several positive integers. The function must evaluate the expression in text and return the answer.

For example, if text = "12*2*10" then getProduct(text) must return 240. Similarly, if text = "4*2*3*1" then getProduct(text) must return 24.

You can assume that text is always a valid expression (e.g., as in the examples above) and will not contain any character other than digits and *.

Task 3:

Create a Student class and initialize it with name and ID number. Create the following function

1. Display - It should display all information of the student including their age and mark.

2. setAge - It should assign age to student

3. setMarks - It should assign marks to the student.

Then create an object of the class Student and check if all the methods works fine.

Sample output of a Display function:

The student: Reza, ID Number: ID123, Age : 30, Mark: 100