

**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