

**Subject: PRF192- PFC**

**Workshop 05**

**Name: Your\_name\_here**

**Student ID: Your\_student\_ID**

**Objectives:**

**(1)** Practicing skills at analyzing and implementing programs using user-defined functions and array.

**(2)** Making familiar with function design, input and output of a function

**Submission:**

Please submit your work including a report and source code.

The report **MUST** be a pdf file. Name of the file should contain your name and your student ID, such as Workshop3\_yourName\_yourStudentID.pdf. The report must contain the pictures of all the test cases that you have done to test your programs. PAY ATTENTION: If you are required to submit at class time, you do not need to submit pdf file.

Name of the file containing source code **MUST** be Workshop5\_yourName\_yourStudentID.c

**Grading programs:**

You are writing a menu for selecting two following jobs. Initially, the menu appears to select the jobs. If the letter "a" or "b" or "c" is pressed, the first or second or third function will be done respectively. The program will be terminated as the letter "q" is pressed. Otherwise, the program will force users to select the menu again. Two functions are as below.

1. The first function is called to read data from the txt file. Please find the attached txt file. The txt file includes 3 fields. The first is the names of the students. The second is the classes of the students. And the third is the score of the students. The function will store names, classes and marks in to three corresponding arrays. Please do traversal all arrays after the function is called to show your result.

2. The second function is called to calculate the length and width of a rectangle with given perimeter and area.

3. The third function is used to calculate the area of circle with given radius.

Remember to design the prototypes of the functions first.

Please pay attention on **PLAGIARISM** that we have agreed at the beginning of the course.