

Subject: PRF192- PFC

Workshop 02

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 Workshop2_yourName_yourStudentID.pdf

The report must contain the pictures of all the test cases that you have done to test your programs

The file of source code **MUST** be named Workshop2_yourName_yourStudentID.c

If you are required to submit at class time, please submit the file of source code only. Please test your script carefully (it means script should be runnable first) before you submit to the system.

Grading programs:

1. Write a function to calculate the total pay of a waitress where the rate of pay (thousand VND / hour) and the number of hours. It is supposed that the number of hours is up 40, the waitress is paid at basic rate, and above 40 at double rate. Test your code in main function.

Example: Input 50 for the rate of pay and 48 for the number of hours, the total pay is 2800

2. Write a function to generate an array containing square numbers given the number of elements. Test your code in main function.

Example: input 5, the output is 1 4 9 16 25

3. Write a function to generate a new array containing the element of a given array where two elements k and k+1 in a given array are swapped. Test your code in main function.

Example: array = {1, 2, 3, 4, 5} and k = 1, then new_array = {1, 3, 2, 4, 5}

Remember to design the prototypes of the functions first.

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