Subject: PRF192- PFC
Workshop 07

Objectives:

Managing strings

Managing parallel arrays

Submission:

Please submit your work including a report and source code. All of them should be contained in a directory which is named as Workshop3_yourName_yourStudentID. Then zip this directory and submit.

The report MUST be a pdf file. Name of the file should contain your name and your student ID, such as Workshop3_yourName_yourStudentID.

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

Problem 1: (3 marks) Managing a list of student names

Write a C-program that helps user managing a list of 100 student names using the following menu:

1- Add a student
2- Remove a student
3- Search a student
4- Print the list in ascending order
5- Quit

Criteria

- Names stored in uppercase, all extra blanks in a name will be removed by code.

Recommendation

Refer to algorithms on string in the lecture's slide

Problem 2: (3 marks) Managing a parallel arrays

- Data about an employee: Code(char 8), name (char 20), salary(double), allowance(double)
- Develop a C-program that allows user:
  - Adding a new employee
  - Find data about employees using a name inputted.
  - Remove an employee based on a code inputted
  - Print the list in descending order based on salary + allowance.

(Helps for this problem are introduced in the lecture's slide)

Problem 3: (4 marks) Managing a parallel arrays

- Data about a soft drink: name (char 20), make(char 20), volume (int), price(int), duration (int- number of days when this product can be drunk)
- Develop a C-program that allows user:
  - Adding a new soft drink
  - Printing out items which belong to a known make.
  - Printing out items whose volumes are between v1 and v2 (integers)
  - Printing the list in ascending order based on volumes then prices.