CL-1002
Programming Fundamentals
Lab # 14

Objectives:

- File handling

Note: Carefully read the following instructions (*Each instruction contains a weightage*)

1. Solve your tasks in same sequence as given in lab manual.
2. First think about statement problems and then write your program.
3. Write Program in C compiler/IDE and save source file **for each program.**
4. Do not copy from any source otherwise your tasks will not accept.
5. Complete your lab **within given Time Slot**. Late submission only accepted with at least 20% deduction (even a single minute late).
   - Submission deadline for CS – 11:30 am
   - Submission deadline for SE – 04:30 pm
6. Add your source code in this **word document (take screen shots of code + output)** + Make one **ZIP file of your all source codes**.
7. Please submit your **Both files** with this naming convention ROLLNO_SECTION_LABNO.
8. Submit your lab on Google Classroom.

Problems

1. Write a C++ program that write in a file firstfile.txt your name, roll number and CGPA. Marks (3)

   Example:

   Name: XYZ

   Roll Number: 21F-1111

   CGPA:4

2. 1. Write a C++ program that opens an already created file firstfile.txt (that you have created in above question). **Marks (3)**

   2. Now read the data of file and display it. (Read the data until you reach end of file).

   3. Now remove all the text from file.

3. You need to create your character dictionary we can called "Char Dict" using the concept of the file handling. **Marks (6)**

   1. Dictionary Initializations:

   a. You need to generate 100 random characters both (Upper Case and Lower Case) and then you need to store in file, you can create text file and name as dict.txt

   2. Character Count

   a. You need to create two function myUpperCase and myLowerCase.

   b. myUpperCase will read only Upper-Case Characters from the file and display.

   c. myLowerCase will read only Lower-Case Characters from the file and display.

   3. Update Dictionary

   a. You need to ask from user if he/she want to update any character from the user.

   b. Let suppose user want to update 'C' character then in file all 'C' should be updated with the new character provided by the user.

   4. Display Content

   a. You need to implement function that can show the whole data from the file, whenever user need.

   5. Dictionary Size

a. You need to create function that can display the size of whole dictionary to user. Note: In this task you need to make the UI/UX also in the best way, it is also included in grading.

4. **Take a 2d character array of size 50x50 . Now make a file with name myfile.txt and add text in following format**

   Pakistan is famous for exports in textile

   America is famous for exports in IT

   China is famous for exports in hardware

   India is famous for exports in agriculture

   Now you have to open the file and copy it character by character in row wise manner in 2d array

   So for example row 0 will contain " Pakistan is famous for exports in textile" row 1 will contain "America is famous for exports in it" . since each line can have different number of characters make sure to add \0 at the end of each line so later on it can be easy to print it

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"Programming is not about typing, it's about thinking" – ...
- Submission deadline for CS – 11:30 am
- Submission deadline for SE – 04:30 pm

Best of Luck 😊