CS112: Computing Laboratory

Assignment :- 9

Date: 15/04/2020

For proper indentation and commenting in the code: 5+5=10 marks

For below questions: 10+(4*5)+10 =40 marks

Total marks: 40 + 10 = 50 marks

1) Write a program to delete all the duplicate values from a singly link list.

2) Consider a circular singly link list to store student details (Name,Roll No,Grade, CPI) in the dictionary order of names. Write the following four functions in such a way that the order should not be violated:

   (a) Take Name and ROLL No as input and delete the node which contains the details of the corresponding student.

   (b) Take students details as input and insert a new node containing the student details in the appropriate position such that the dictionary order of names should be preserved.

   (c) Compute the no. of students stored in the above circular singly link list.

   (d) Reverse the order of students in the above circular singly link.

3) Write a C program that would sort a list of names in alphabetical order.
   Note: Use two dimensional array to store names.

Instructions to follow:

1. Implement all the above programs and give the file names as follows:
   a. Name of program file: question_1.c
   b. Name of output file: output_1.out
   c. Run with few sample inputs and mention the details: execution_1.txt
          *** Note that the format of details in execution_1.txt would be:
                     Run1: Input: 4   Output: 567

Run 2: Input: 19   Output: 5678

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2) Create a zip file which includes all the above files naming it **<Student_EmailID>.zip** and upload the zip file through google form: https://docs.google.com/forms/d/e/1FAIpQLSckK2kp50f761Bpe_i4csOnomz4igIsh8uVn PB7MR_z66OJKg/viewform?usp=sf_link

3) **Deadline of submission :- 6 PM 16/04/2020 (sharp)**

4) Feel free to contact your respective TA for any query.