## National University of Computer and Emerging Sciences, Lahore Campus



Course:
Program:
Duration:
Paper Date:
Section:

Exam:

Object Oriented Programming Lab BS (CS, DE, SE)

2 Hour 30 Minutes + 20 minutes 26-Jun-21

SE-2A, SE-2B, DS-2A, CS-2E & CS-2F Lab Final Course Code: Semester: Total Marks:

Weight

Page(s):

Roll No.

CL-217 Spring 2021

100 60 %

20L-1080.

Instruction/Notes:

You have to complete exam in 2 hrs 30 minutes. An extra 20 minutes are for submission.

- For each question, create a folder named by your Roll number in the format 19L-9085 which should contain your .h and .cpp files. Submission Path is \\catumeter \( \text{Con\Spring} \) 2021\\Object Oriented Programming Lab\\Final\\BCS-2X\\QY. (X is your section, Y is Q#)
- Submit both questions in a zipped folder (named as your roll number) on Google Classroom as well.
- Your code should be intended and commented properly. Use meaningful variable names.
- It is your responsibility to save your code from being copied. All matching codes will be considered cheating cases. PLAGIARISM will result in forwarding of case to Disciplinary Committee and negative marks in Final

Question No. 01: Marks: 40

Given is the data members of class Binary. You have to complete the class definition such that the provided main function runs perfectly. Both class declaration and main are placed at: \\cactus\Xeon\Spring 2021\Object Oriented Programming Lab\Final\Helping Material

Question No. 02: Marks: 60

Google Calendar helps one to create a reminder for a task on any day and time. Every task is scheduled on specific day and time. A task will hold information of the Date and Time when it is scheduled (Date and Time classes are provided in Helping Material Folder). Task can be of two types i.e. a OneTimeTask or a RecurringTask. A recurring task has a special quality that it needs to be repeated. It can be a daily recurring, a weekly recurring task or a monthly recurring task. Task, RecurringTask and OneTimeTask should have print function that will print all information of the task as well as if its type. There is a class DailyPlanner that will hold a list of tasks in it for a particular day, number of tasks scheduled so far and maximum number of tasks that can be scheduled in that day. ToDoList is another class that has the DailyPlanner for the whole Year in it.

You have to implement two function in ToDoList:

void AddTask(Task \* T)
 This function adds the task T in ToDoList. It should be placed on the same date, month as the date information stored in T.

void GetSchedule(myDate Starting, myDate Ending)
 This function prints tasks between starting and ending date.

The basic skeleton of code and main is provided at \\cactus\Xeon\Spring 2021\Object Oriented Programming Lab\Final\Helping Material Please read the comments carefully in these files.

FAST School of Computing

12 -11 = 2

14 -11 = 2

13 -11 = 3

13 -14 = 1

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Page 1

taskdate  $e \rightarrow start$ and end

Light = 3

diff