

CSE 215L: Programming Language II Lab

Section: 7, Fall 2020 Final Exam Total marks: 45

Time: 4:20 pm - 8:00 pm

Instructions:

- You need to solve both the tasks
- Create a folder and use your student ID number as the name of this folder
- Copy your task files (the .java files) to this folder
- Zip the folder and submit it in Google Classroom
- Late submission will cause a penalty. For every 5 minutes, 2 marks will be deducted

<u>Task 1.</u> (15 points)

Write a program that creates an integer array of size 100 and initialize it with random integer numbers.

The program then takes an integer from the user, uses it as an index and tries to print the corresponding element of that array. If the index is out of the array size (for example 113, -1, 230 etc), the program should catch the exception and display an appropriate message.

You also need to count how many times the program "Task 1" has been executed and store the number in a file named "Count.txt".

 $\underline{\mathsf{Task}\ 2} \tag{30 points}$

Design a monthly to-do list program. The test program should show three options to the user:

- 1) Add a task
- 2) Show tasks to do
- 3) Exit

If the user chooses 1, the program should ask the user to enter the month and then let the user add a task for that month.

If the user chooses 2, the program should ask the user to enter the month and show all the enlisted tasks for that month.

The program should allow the user to continue the whole process as long as the user wants.

If the user chooses option 3, the program should terminate.

The records of the monthly tasks should include all the tasks added by the user in every execution of the program and show them according to the month whenever the user chooses option 2.

*** You will be graded based on the efficiency of your program. You may design the program anyway you think suitable as long as it satisfies the requirements given.