CSE 203: Assignment #2 (Sec C)
Due Date: 25 October, 2023 (At the beginning of class)

Instructions:

- The code should be **handwritten.**
- Should submit the **hard copy at the beginning of the class** on 25th October.
- Copied assignments will be graded 0.
- For Q2, 3, and 4, create your own class. Do not use any classes that are frequently used as samples online or that are used during lectures.

Problems:

1. Assume your OOP course teacher is storing the scores of assessments, mid and final in a txt file where each line contains the id of the student followed by the 3 scores (all scores are out of 100) as shown in the sample file below. Write a java program to read the file (one line at a time), calculate the total score which is 30% of assessment + 20% of mid + 50% of final and also calculate the letter grade of each student, and then write that info in a txt file in the format [id total_score letter_grade] separate file. Sample input and output file is given below.

Sample input file (intput.txt)	Expected output file(output.txt)
22101001 80 70 80	22101001 78.0 A
22101002 70 80 66	22101002 70.0 A-
22201005 90 50 94	22201005 84.0 A+
22201007 45 18 50	22201007 42.1 D
22201017 60 60 60	22201017 60 B

2. Write a java program to store the values of instance variables of 2 objects of any class (Do not use classes that are frequently used as samples online or that are used during lectures) in a text file named "data.txt".

3. (Continuation of Q2) Write a java program to read the values from the "data.txt" file and create objects of respective classes then display the info in console.

4. Write a java program to serialize and deserialize the object of Q2. Store the data in "data_ser.txt" file and read from the same file.