

Assignment 11

Due: July 14th (Thursday) before 11 am

Students' Grade Report With Classes

The objective of this assignment is to **rewrite the Students' Grade Report (assignment 9) using classes**. A major part of your grade for this project is assigned for writing the same program using classes. There should be at least one class for the Student and another class with the main() methods that uses the Student class.

Write a java program named **StudentsGradeReportWithClasses.java** that works as per the following specifications.

1. Get the number of students as input from the user.
 - a. You can assume that the user enters a **valid positive integer**.
2. Prompt the user to enter the name and score for all the students. The name and the score of each student should be entered with a space in between.
 - a. You can assume that the user enters a **string for the name** and a **double value (in the range of [0, 100]) for the score**.
3. Compute the following and display as show in the sample run.
 - a. Average score
 - b. Maximum score
 - c. Student(s) with the maximum score
 - d. Grade Report
 - e. Grade Distribution

NOTE:

1. The user input is shown in **blue** in the sample run.
2. Use the grade cutoffs at our course webpage to calculate the letter grades:
<http://pages.cs.wisc.edu/~gerald/cs302/grades.html>

SAMPLE RUN:

```
Enter the number of students: 5
Enter name and score of student 1: Rob 89.50
Enter name and score of student 2: Bob 78.25
Enter name and score of student 3: Tom 98.75
Enter name and score of student 4: Job 55
Enter name and score of student 5: Ram 98.75
```

The average score = 84.05

The maximum score = 98.75

The student(s) with the maximum score:

Tom

Ram

GRADE REPORT

Rob - AB

Bob - BC

Tom - A

Job - F

Ram - A

GRADE DISTRIBUTION

of As: 2

of ABs: 1

of Bs: 0

of BCs: 1

of Cs: 0

of Ds: 0

of Fs: 1

Grading

Item	Points
Correctness of your code	10
Design of your classes	8
Code style and commenting	2
TOTAL	20

Turning in

Upload and submit the Java file **StudentsGradeReportWithClasses.java** in the folder named **Assignment11** using the **dropbox** facility at learn@uw.