

# COSC 1P02 Assignment 6

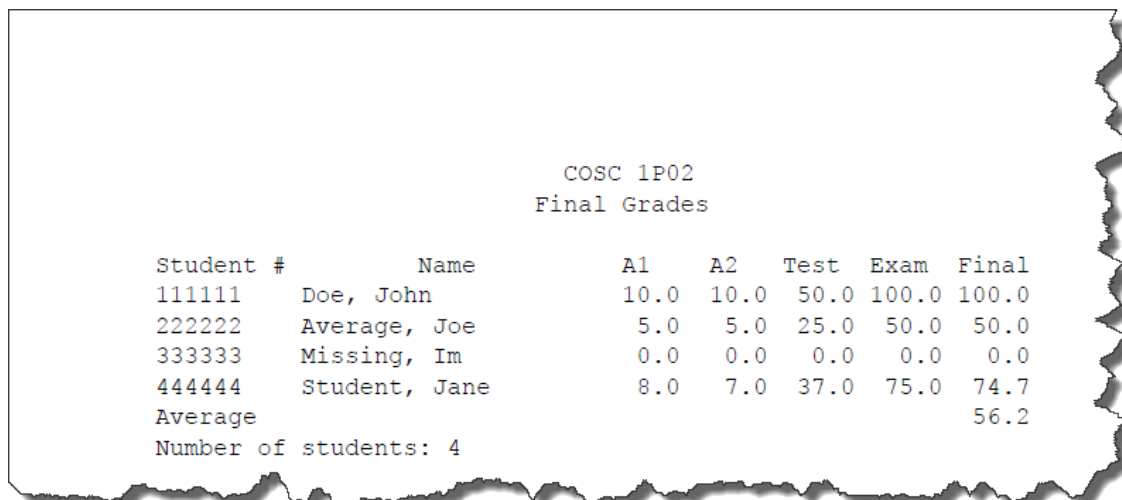
## Making the Grade

**Due: Nov. 25, 2016 @ 4:00 pm (late date Nov. 28 @ 4:00 pm)**

The emphasis for this assignment is processing data files and writing reports. In preparation for this assignment, create a folder called Assign\_6 for the DrJava project for the assignment.

### Final Grade Calculation

Write a Java program to compute final grades for a course and produce a final grade report. Students in the course complete two assignments, a test and an exam. A file (ASCIIDataFile) of mark data is prepared over the term. It contains the course name (string) followed by, for each student, the student number (string), name (string) and the marks for assignment 1 (double), assignment 2 (double), test (double) and exam (double). The report lists the students' student number, name, marks in the assignments, test and exam and final grade. In addition, as summary, it presents the average final grade in the course and the number of students included in the report. The report would look similar to the following:



COSC 1P02 Final Grades						
Student #	Name	A1	A2	Test	Exam	Final
111111	Doe, John	10.0	10.0	50.0	100.0	100.0
222222	Average, Joe	5.0	5.0	25.0	50.0	50.0
333333	Missing, Im	0.0	0.0	0.0	0.0	0.0
444444	Student, Jane	8.0	7.0	37.0	75.0	74.7
Average						56.2
Number of students: 4						

The final grade is computed from the marks as the sum of each individual mark divided by the base mark and multiplied by the weight (contribution to the final grade). The assignments are each marked out of 10 and have a weight of 10. The test is marked out of 50 and has a weight of 30. The exam is marked out of 100 and has a weight of 50.

### Hints:

- The program should process the data file to EOF counting the students.
- You should include a method to calculate the final grade as described above.
- You should include separate methods to set up the report format, write a detail line and write the summary data.

### Submission:

Details regarding preparation and submission of assignments in COSC 1P02 are found on the COSC 1P02 Sakai Site as Assignment Guidelines under

Course Documents. This document includes a discussion of assignment preparation, programming standards, evaluation criteria and academic conduct (including styles for citation) in addition to the detailed assignment submission process copied below.

To prepare and submit the assignment electronically, follow the procedure below:

1. Ensure your submission folder (Assign\_6) contains the DrJava project for the assignment.
2. Using DrJava, print (to CutePDF Writer) the .java file for your assignment using the name *ClassName.pdf* where *ClassName* is the class name (i.e. same name as the .java file) and save the .pdf file at the **top level** of the submission folder (i.e. directly within Assign\_6).
3. Run the program using the file `stData.txt`. When the program requests the printer selection, choose Cute PDF Writer. When it presents the save dialog for the printed report, save it as `grades.pdf` at the **top level** of the submission folder (i.e. directly within Assign\_6).
4. Create a .zip file of your submission by right-clicking on the top level folder (i.e. Assign\_6) and selecting  
Send to/Compressed (zipped) folder. A zipped version of the folder will be created. Use the default name (Assign\_6.zip).
5. Log on to Sakai and select the COSC 1P02 site.
6. On the Assignments page select Assignment 6. Attach your .zip file (e.g. Assign\_6.zip) to the assignment submission (use the Add/Remove Attachments button and select Browse). Navigate to where you stored your assignment and select the .zip file (Assign\_6.zip). The file will be added to your submission. Be sure to check the Honor Pledge checkbox. Press Submit to submit the assignment. You should receive a confirmation email.

## DrJava

The .zip folder you submit should contain the project folder including all files relevant to the project—the .java and .class files for the assignment—and the .pdf files for program listings and output at the top level.

## Other Platforms

If you are using an IDE other than DrJava to prepare your assignment, you must include the .java source files and the .pdf files described above for each part as well as an executable file (likely .class or .jar) that will execute on the lab machines.