In this assignment, you use eclipse for database java programming.

We have shared the csv file named grdreport containing a grade report for a course as follows: student\_ID,course\_id, section\_id, semester,year,grade ..... one line for each student

We have shared the .sql file named insertValues which will insert new course '303' into course and section tables. Also it will insert 10 rows in a table with blank grade.

You can check if grade column is blank by running the following query in psql terminal: select \* from takes where course\_id='303'; //Type the query,copy paste might give error for quotes

Write a java+jdbc program for the following:

Your java program reads the csv file, checks that such a course is running and that given students have indeed registered for the course. Currently student has a blank grade, and then the program updates the grade (in takes table) as given in the csv file and if the grade is not 'F', it also increments tot\_cred of the student (student table) by the credits given for that course (as given in the course table).

At the end, your program gives the following output:

- no of students in the grade report
- no of students that have passed
- no of students with FF grade

## NOTE:

- 1. No need to worry about earlier values of tot\_credits column of student table. Whenever the student in the csv file has grade other than 'F', just increment the tot\_credits with credits of the course taken by a student.
- (Here we have taken only 303 course in the file)
- 2. Organize your java code systematically into classes with appropriate methods. It SHOULD NOT be one big piece of 'monolithic' code.
- 3. For example, you can have a class GradeReport which can open and parse the given input csv file and get the next entry. You can have a class called Students with the methods to check if the course is running, add grades for a course for a given student and increments total credits of the student if grade is not 'F'. Do not write just a single main class that does everything. Use object orientation to make your program modular as a good programming practice.

## **Submission**

1. Submit the java files with screenshots of output as a .zip file named with your roll number.Submission due time: Tuesday (13th october) 8 am on moodle.

Reference link for reading csv file into string array in java ( for those who are not familiar with java programming)

https://mkyong.com/java/how-to-read-and-parse-csv-file-in-java/