
CS345: Database Laboratory

Database Regular Lab Session (1 Questions, 20 Points)

Time: 09:00–12:00 (3.0 hours.) Pages: 2

IIT Guwahati

23 Feb 2018 (Fri) Lab session: ML5

Question 1: (20 points)

You are given a database (database-19-jan-2018) containing three distinct files schemas:

- **exam-time-table.csv**: `line_number`, `course_id`, `exam_date`, `start_time`, `end_time`¹
- **course-credits.csv**: `course_id`, `number_of_credits`
- **course-wise-student-list** `serial_number`, `roll_number`, `name`, `email`, `course_id`²

1. Problem Statement

- Create a database with name `roll_number_23feb2018`.
 - Create three tables with names `ett`, `cc` and `cws1`.
 - A registered student should not have exam time table clash with his/her set of registered courses. Write a stored procedure `tt_violation` which takes **no parameters** and **lists** student roll number, student name and the two courses id's having exam time table clash if there are any clashes. You should write the stored procedure in a file named `your_roll_number_tt_violation.sql`.
 - Total number of credits registered by a student should not exceed 40. Write a stored procedure `count_credits` which takes **no parameter list** and **list** the student roll number, student name and total number of credits registered who have violated this constraint. You should write the stored procedure in a file named `your_roll_number_count_credits.sql`.
- Deviating from problem statement will result in evaluators discretion in awarding marks.
 - You should write comments extensively in each of the stored procedures.

4. Instructions

- You should present in the lab for all the three hours.
- You must use SQL to achieve this task.
- Naming convention:** For every file you create, prepend the file with your roll number. For example, if you create an SQL file with name: `course.sql` then the file name should be `150101999_course.sql`.
- File to be submitted:** You should submit the following:

¹`line_number` attribute and associated data are not present in the exam-time-table.csv file. You have to create this schema and insert the `line_number` data.

²`course_id` information is available from the file name and you should insert this information into the table.

- i. Dump (using `mysqldump`) of the database `roll_number_23feb2018`.
 - ii. Stored procedure files `your_roll_number_tt_violation.sql` and `your_roll_number_count_credits.sql`.
- (e) **Submission Policy:**
- i. **On time submission:** Assignments which reached my mail box on or before **09-Mar-2018, 23:59:59:00 hours**. There is NO penalty associated with these submissions.
 - ii. **Late submission policy:** Any submission after the specified on-time submission WILL NOT BE EVALUATED. They will be awarded 0 marks.
 - iii. **Double submission policy:** You should submit the assignment **once and only once**.
 - iv. **Series of valid excuses:** Students who still have excuses SHOULD excuse the instructor.
 - v. **Absentee submission:** For your assignment to be evaluated, you SHOULD present in the lab and sign the attendance sheet. In case you are absent for the lab and found to submit the assignment, your submission will be evaluated and will receive as many **negative marks** for the positive marks you earned in the evaluation process without any further discussion.
 - vi. **CS345 lab work:** You should dedicate your time only for the purpose of CS345. In case TA finds you performing activities other than CS345 related he/she has the right to take away your attendance.
- (f) **CSE student only:** You are not allowed to perform **mysql** installation during the lab session. If you have not installed **mysql** please leave the lab without disturbing fellow students.
- (g) **Maths & Computing students only:** Changing of the root password of mysql server will invite disciplinary action.
- (h) **Mobile phones** are not allowed inside the lab.
- (i) **Silence:** Any discussion among students should take place outside the lab. TAs has every right to maintain order in lab.
- (j) **Submitting your solution:** email to vijaya.saradhi@gmail.com. Subject: CS345: assignment-6: Your roll number.
- (k) Attach the .tar.gz file prepared in step 3 (d).
5. **Marking Policy:** For each stored procedure the following marks scheme is adopted.
- (a) correct variable declaration: 1
 - (b) cursor declaration and correct select statement: 1 + 2
 - (c) correct usage of loop: 1
 - (d) error handling: 1
 - (e) correct usage of conditional statements: 1
 - (f) correct output: 3