CS246: Database Management Systems Lab

Lab # 10 (1 Questions, 100 Points)
Submission time: on or before 29-May-2020 at 11:59 (AM) hrs
Pages: 3

IIT Guwahati

26-May-2020 (Tue)

Question 1: (100 points)

Embedded SQL programming You are given files with the given format:

Input files description

exam-time-table.csv contains the following columns line number, course id, exam date, start time, end time[1]

course-credits.csv contains the following columns course id, number of credits

course-wise-student-list serial number, roll number, name, email, course id[2]

Note The tgz database is shared with you.

Problem Statement Your task is to:

1. Create a database with `your_roll_number_26may2020`
2. Create three tables with names ett (exam time table), cc (course credits) and cwsl (course wise students list) with appropriate primary key, foreign key and other constraints.
3. Load the given data into these three tables. Read the mysql manual for loading data into tables given at
   `https://dev.mysql.com/doc/refman/8.0/en/load-data.html`
4. A registered student should not have exam time table clash with his/her set of registered courses. **Write a C/C++ program in which SQL statements are embedded** to list student roll number, student name and the two courses id's having exam time table clash if there are any clashes. For details and example on how to embed SQL into C/C++ programs go through the reference manual go through the documentation
   `https://dev.mysql.com/doc/refman/5.7/en/libmysqld-example.html`
   Note: You should not call your stored procedure written in the previous assignment.
5. Total number of credits registered by a student should not exceed 40. **Write a C/C++ program in which SQL statements are embedded** to list the student roll number, student name and total number of credits registered who have violated this constraint. For details and example on how to embed

[1]First column should contain the line number. This information is not present in the give csv file. You should include this information.

[2]course id is information is available from the file name and you should include this information into the table.

SQL into C/C++ programs go through the reference manual go through the documentation
`https://dev.mysql.com/doc/refman/5.7/en/libmysqld-example.html`
Note: You should not call your stored procedure written in the previous assignment.

6. You should also provide the way to compile your program.

Instructions Adhere to the following

`mysql dump` file Read the following for creating dump `https://dev.mysql.com/doc/refman/8.0/en/mysqldump.html`

file names Submit two files with names `your_roll_number_tt_violation.cpp/c++/c` and `your_roll_number_count_credits.c++/cpp/c`.

Single submission file Place the above files into a .tgz file. Do not forget to prefix your roll number with each file name.

Independent efforts You should make an honest and independent effort in obtaining the solution to the above problem.

Submission Table below shows which student should submit to which TA

Swarup	b.swarup@iitg.ac.in	180101001	180101010
Arnuav Saikia	arunav.saikia@iitg.ac.in	180101011	180101020
Ayasha	ayasha@iitg.ac.in	180101021	180101030
Monish Kumar	bmonish@iitg.ac.in	180101031	180101040
Bawane Akshay	a.bawane@iitg.ac.in	180101041	180101050
Dharmendra	dharmend@iitg.ac.in	180101051	180101060
Gagan	g.gagan@iitg.ac.in	180101061	180101070
Hardik Kumar	hardik.kumar@iitg.ac.in	180101071	180101080
Jyotish Saikia	jyotish.saikia@iitg.ac.in	180101081	180101091
Chiranjeevi	kanaka@iitg.ac.in	180101092	180123002
Krishnavandan	k.padhye@iitg.ac.in	180123003	180123012
Mohd Zeeshan	mohd18@iitg.ac.in	180123013	180123022
Rishabh	rdhawan@iitg.ac.in	180123023	180123032
Sagar Kumar	sagarkumar@iitg.ac.in	180123033	180123042
Sandesh	sandesh19@iitg.ac.in	180123043	180123052
Sunil Nomeshwar Naik	nomeshwa@iitg.ac.in	180123053	180123065

Marking Scheme The evaluation criteria is as follows:

Question 1 (1) 2 marks

Question 1 (2) 9 marks (3 marks for each table)

Question 1 (3) 19 marks

- 4 marks for loading data into ett table (2 marks for including line number information; 2 marks for loading data)
- 2 marks for loading data into cc table
- 13 marks for loading data into cwsl table

Question 1 (4) 35 marks

- 30 marks for embedding SQL queries into C/C++ program
- 5 marks for correct output

Question 1 (5) 35 marks

- 30 marks for embedding SQL queries into C/C++ program
- 5 marks for correct output