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# CS246: Database Management Systems Lab

Lab # 08 (1 Questions, 50 Points)

Submission time: on or before 15-May-2020 at 11:59 hrs    Pages: 2

**IIT Guwahati**

12-May-2020 (Tue)

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**Question 1:** (50 points)

**Assume that** you are given files with the given format:

**Input files** description

**courses.csv** Each line contains information about one course. The following attributes are given for each course

- Course id
- Name of the course

**students.csv** Each line of this file contains information about one student

- Name
- Roll number

**registers.csv** Each line of this file contains description about student's registered courses

- Roll number
- Course id

**Note** No database is shared with you. You should perform the MySQL implementation assuming that such a database exists

**Problem Statement** Your task is to:

1. Create a new database
2. Create three tables associated with each of the csv file
  - (a) Enforce primary key constraint on each table
  - (b) Enforce foreign key constraint on registers table
  - (c) Specify On Delete and On update conditions
3. Insert the given data into respective tables
4. Write separate triggers for each of the question
  - (a) On inserting a new student in the students relation, ALL the courses must be registered for this student in the registers relation
  - (b) Total number of students in CS245 cannot exceed 200
  - (c) On inserting a new odd numbered HSS course in the even semester, all the even roll numbered students should register for this course
  - (d) On inserting a new even numbered HSS course in the odd semester, all the odd roll numbered students should register for this course

**Instructions** Adhere to the following

**Write SQL program** in a file and store them.

**File Name** Keep your roll number as the name of the file. Example: 180101000.sql

**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

TA Name	TA E-mail	From Roll No.	To Roll No.
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 Nomeswar Naik	nomeshwa@iitg.ac.in	180123053	180123065

**Marking Scheme** The evaluation criteria is as follows:

**Point 3** 6 Marks (2 marks for each task 3(a), 3(b), and 3(c))

**Point 4** 4 Marks

**Point 5(a)** 10 Marks

**Point 5(b)** 10 Marks

**Point 5(c)** 10 Marks

**Point 5(d)** 10 Marks