
CS345: Database Laboratory

Database Regular Lab Session (1 Questions, 20 Points)

Time: 09:00–12:00 (3.0 hours.) Pages: 1

IIT Guwahati

19 Jan 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:** `course_id`, `exam_date`, `start_time`, `end_time`
- **course-credits.csv:** `course_id`, `number_of_credits`
- **course-wise-student-list** `serial_number`, `roll_number`, `name`, `email`

1. Problem Statement

- Read the given input files/directory (i) using file pointers (ii) using directory reading mechanism and (iii) with appropriate data structures to stores the given schemas.
- Your task is to list all the roll numbers (along with names of the student) who violate the following two important registration constraints:
 - A registered student should not have exam time table clash with his/her set of registered courses. If there are any exam time table clashes, list the roll number and student name and the two courses having exam time table clash.
 - Total number of credits registered should not exceed 40. List the roll number, student name and total number of credits registered who have violated this constraint.
- Deviating from problem statement will result in evaluators discretion in awarding marks.

2. Instructions

- You must use C programming language to achieve this task.
- Name the file should be `your_roll_number.c`
- Submit your program on or before 12:30 PM. Plan your tasks within this time frame.
- Cell phones are not allowed inside the lab.
- Submitting your solution:** email to vijaya.saradhi@gmail.com. Subject: CS345: Your roll number.
- You are expected to obtain solution of this problem independently.