CSE 4410

DATABASE MANAGEMENT SYSTEMS II LAB

SWE 21

CSE
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Lab 1 Introduction

Welcome to CSE 4410.

1 Marks Distribution

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2 Approximate Course Outline

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2. Tablespace
3. JDBC Connection + (Project Proposal Submission)
4. PL/SQL
    a. Function/Procedure
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5. Project Progress Presentation
6. NoSQL [MongoDB]
    a. Theory
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7. Graph-based Database [Neo4j]
    a. Theory
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3 Task - Group B

Consider the schema shown in Figure 1.1 for the database of a university:

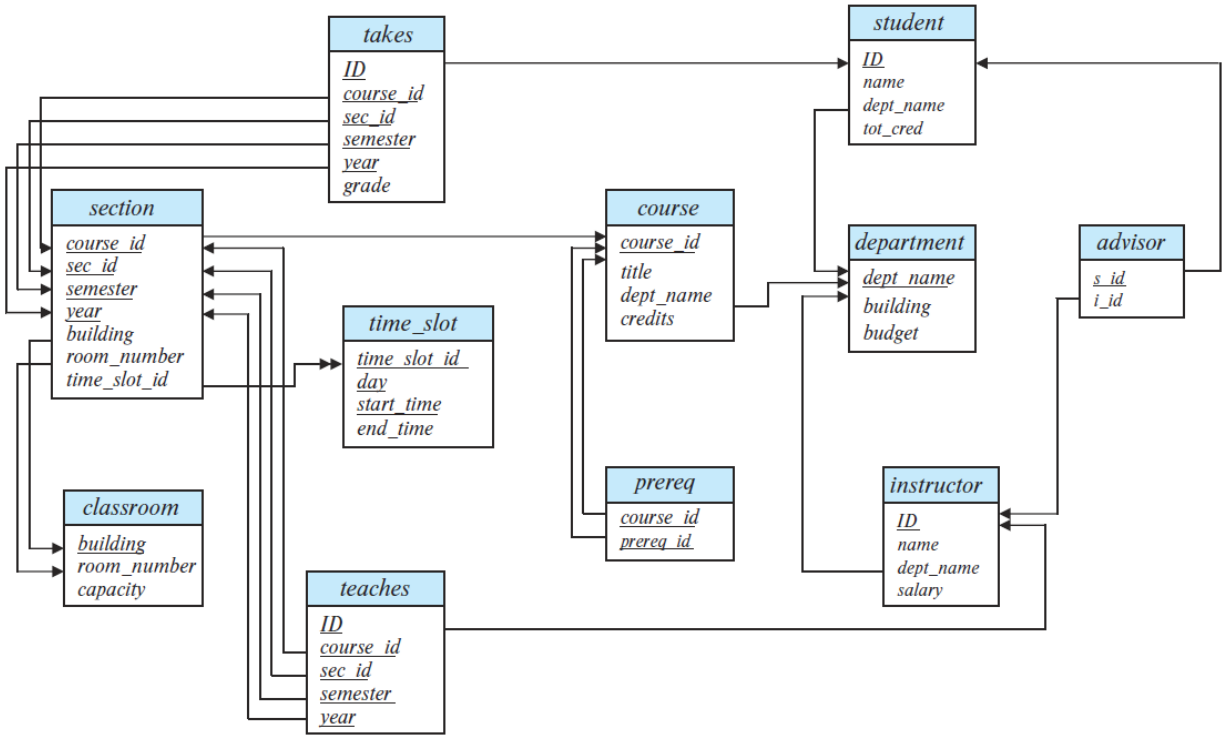

Figure 1.1. Schema diagram for a university database

Write the command `@"<file_path>\<file_name>.sql"` in your SQL command line to execute the provided .sql files. Now, write SQL statements to answer each of the following queries:

1. Find the names of all the instructors from the 'Biology' department.
2. Show the Course ID and the Title of all the courses registered for by the student with ID '73492'.
3. Find the names and department names of all the students who have taken a course offered by the 'Comp. Sci.' department.
4. Find the names of the students who take 'CS-101' course in 'Spring, 2018'.
5. Find the names of students who have taken the highest number of courses with a specific prefix 'CS'.
6. Find the names of students who have taken courses taught by at least three different instructors
7. Find the course name and section having the minimum number of enrollments. Do not include the sections that do not have any students enrolled.
8. Find the name of the instructor, dept_name, and count of students he/she advising. If an instructor is not advising any student, show 0.
9. Find the name and department of the students who take more courses than the average number of courses taken by a student.
10. Insert each instructor as a student with total credit set to 0 in the same department they are teaching.
11. Remove all the newly added students from the previous query.
12. Update the 'tot_cred' for each student based on the credits taken.
13. Update the salary of each instructor to 10000 times the number of course sections they have taught.
14. Grades are mapped to a grade point as follows: A:10, B:8, C:6, D:4, and F:0. Create a table to store these mappings, and write a query to find the Credit Point Information (CPI) of each student, using this table. Make sure students who have not got a non-null grade in any course are displayed with a CPI of null.