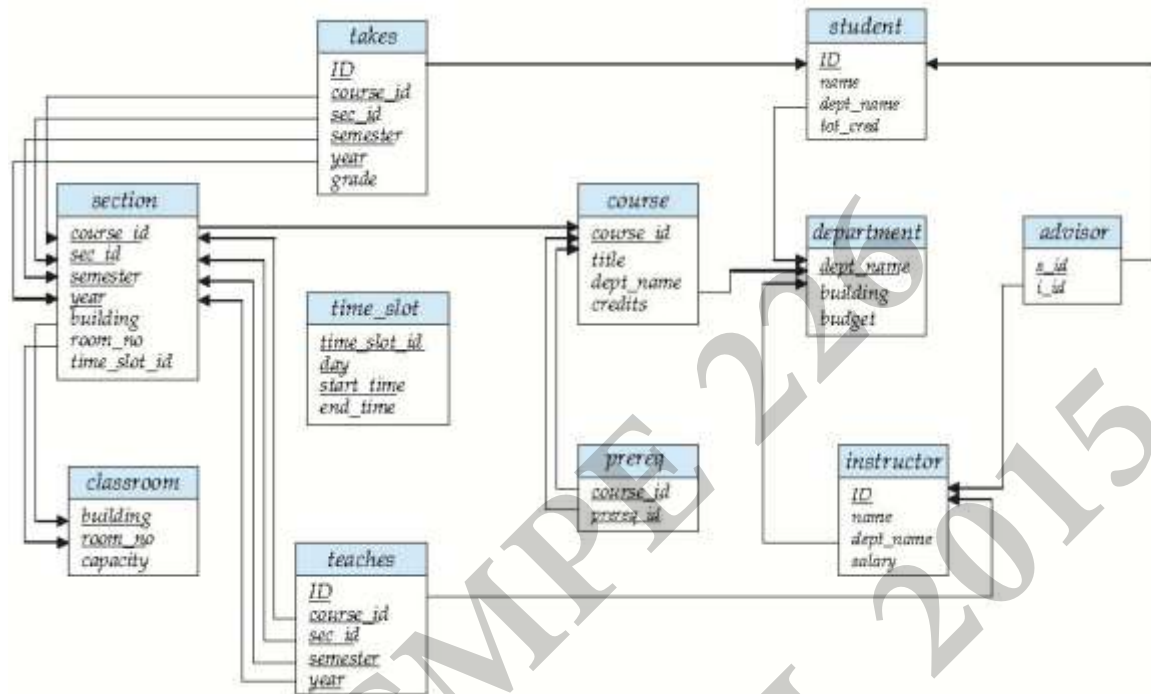


SJSU CMPE 226 HW2 FALL 2015

1. Given the following university database where primary key for each table is underlined, formulate a SQL query for each of the following questions.



For testing purpose, please create a database named as **hw3_Yourname_L3SID** on any relational database engine. Use the enclosed database scripts (for Microsoft SQL and MySQL) as reference to create necessary tables and populate tables with data. Note you may utilize any relational database engine (not limited to Microsoft SQL and MySQL).

- Find the department name that has the highest average salary. There could be more than one such departments (with the same average salary).
- For each course section offered in 2009, find the average total credits (tot cred) of all students enrolled in the section, if the section had at least 2 students.
- Find the total number of unique students who have taken course sections taught by the instructor with ID 110011.
- Use nested query and EXISTS to find all course ids taught in Fall 2009 but not in Spring 2010.
- Use nested query and IN to find all course ids taught in both Fall 2009 and in Spring 2010.
- For *each* department in department table, find out the number of instructors who taught at least one class in 2010.
- Without* using GROUP BY, find out course ids which were offered more than once in year 2009.

- h. Among department whose name include the letter *i*, whose instructor average salary > 42000, and which has at least two instructors, list such department name in descending order.
- i. Include a query execution screenshot for the query “Among department whose name include the letter *i*, whose instructor average salary > 42000, and which has at least two instructors, list such department name in descending order”, where the screenshot must include
- SQL query (input),
 - The query result (output), and
 - Highlight the database named as hw2_Yourname_L3SID
 - Microsoft SQL: SQL Management Studio (which displays DB name), or command line util (invoke “SELECT DB_NAME () ” to show the current DB name)
 - MySql: Workbench (which displays DB name), or command line util (invoke “SELECT DATABASE () ” to show the current DB name)

Also indicates the database engine (and DB version) used to execute the query. You may utilize any RDBMS. Any unreadable screenshot will receive 0 point.

Submit the following *single* file

- CMPE226_HW2_YourName (.pdf, .doc, or .docx)

The ISA and/or instructor leave feedback to your homework as comments and/or in Crocodoc of your submission. To access Crocodoc, click “view feedback” button. For details, see the following URL:

<http://guides.instructure.com/m/4212/l/106690-how-do-i-use-the-submission-details-page-for-an-assignment>