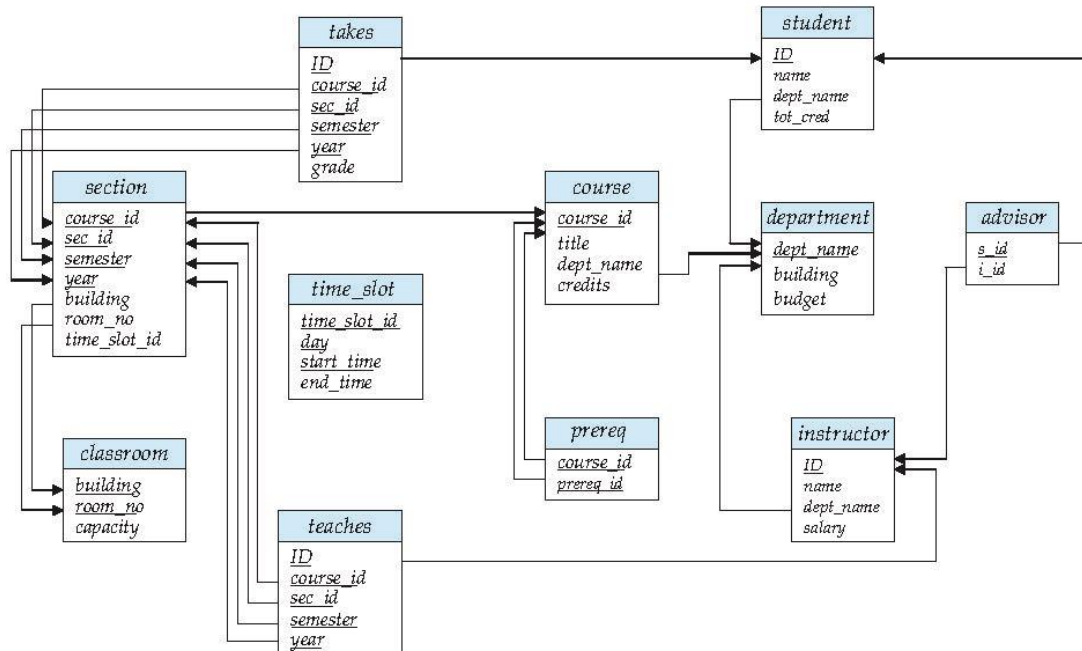


SQL Exercise – Data Management

Following Diagram presents a university relational database systems:



Questions:

Write SQL statements to find answers to following Questions:

Q1) How many total courses are offered so far?

Q2) Which 2 semesters had most number of courses offered?

Note: section table holds information about semester and courses.

Q3) Which 3 rooms have the largest capacity?

Q4) What is the average budget for each buildings?

Q5) Which department has the lowest budget?

Q6) Which course has been the least popular looking at total number of students who took the course.

Note: **takes** table hold the information about student and course when it was enrolled.

Q7) Are there any students who never been supervised by an instructor?

If Yes, Write an SQL to retrieve a list of students who never took any supervision.

- Please note **advisor** table holds supervision details

Q8) Are there any students who never took a single course?
If yes, Write an SQL to retrieve list of those students.

Q9) Write an SQL to retrieve top 5 instructors with respect to number of courses they taught.

Note: **teaches** table holds information about teachers and course relation.

Q10) Are there any instructors who never taught a course?
If yes, Write an SQL to retrieve list of those instructors.

Q11) Please explain what type of joins are used for each SQL statement for Q1-Q10. Simply name the type of join.