Practice Problems

Try to Solve using Sub-Query

1. Find all the courses taught in both the Fall 2009 and Spring 2010 semesters.

2. Find all the courses taught in the Fall 2009 semester but not in the Spring 2010 semester

3. selects the names of instructors whose names are neither “Mozart” nor “Einstein”.

4. find the total number of (distinct) students who have taken course sections taught by the instructor with ID 110011

5. Find the names of all instructors whose salary is greater than at least one instructor in the Biology department.

6. find the names of all instructors that have a salary value greater than that of each instructor in the Biology department

7. Find the departments that have the highest average salary

8. Find all courses taught in both the Fall 2009 semester and in the Spring 2010 semester

9. Find all students who have taken all the courses offered in the Biology department.

10. Find the average instructors’ salaries of those departments where the average salary is greater than $42,000.

11. find the maximum across all departments of the total salary at each department

12. lists all departments along with the number of instructors in each department

13. Find the titles of courses in the Comp. Sci. department that has 3 credits.

14. Find the IDs of all students who were taught by an instructor named Einstein; make sure there are no duplicates in the result.

15. Find the highest salary of any instructor.

16. Find all instructors earning the highest salary (there may be more than one with the same salary).

17. Find the enrollment of each section that was offered in Autumn 2009

18. Find the maximum enrollment, across all sections, in Autumn 2009.

19. Find the sections that had the maximum enrollment in Autumn 2009.

20. Find the names of all students who have taken at least one Comp. Sci. course; make sure there are no duplicate names in the result.

21. Find the IDs and names of all students who have not taken any course offering before Spring 2009.

22. For each department, find the maximum salary of instructors in that department.

23. Find the building and room number in which the maximum number of courses is being taken.

24. Find the student name(s) who takes the maximum/minimum number of credits.

25. List the instructor who gets more than the average salary among all the instructors.

26. Find the instructor name and id who advised more than 2 students.

27. Find the student names taking the maximum total credits based on departments.

28. Find the student names taking the maximum total credits among all the departments.

29. Find all the buildings where a class is held between 9:20-2:00

30. Find the instructors name(s) who teaches the maximum/minimum number of courses.

31. List the course(s) name which requires more than 2 pre-requisite courses.

32. List the student name(s) who got more than "C+"

33. Find the department name(s) which provides the maximum number of courses.

34. Find the instructor name who takes the course titled "Music Video Production".

35. Find the building names which covers less than the average budget of all buildings.

36. Find the course title in which student gets the maximum number of same grades.

37. Increase the salary of all the instructors by 12.5% who gets less than the average salary and show the updated salary.

38. Find the student names who take a course teaches by an instructor from the department of "Elec. Eng." or named as Katz or gets the maximum salary.

39. Replace the instructor who teaches in the Computer Science department and gets the maximum salary of that department to "Physics" department.

40. Find the number of students who gets the grade "B" but not from Computer Science department.