Self-Practice Exercises For Midterm Preparation

Basic SQL on the database: University in user UV

1. Find the ids and names of all the instructors from Biology department. Print the heading BIOLOGY_INSTRUCTORS for the query result. Separate the ids and names using a space.
2. Find the titles of 3-credit courses in Computer Science Department. Print the heading **3Credit CS Courses** for the query result.
3. For the student with ID 12345 (or any other value), show the course ids and course titles of all courses registered for by this student.
4. As above in Q3, but show the total number of credits for such courses taken by that student. Don't display the **tot_creds** value from the **student** table, you should use SQL aggregation on courses taken by the student.
5. As above in Q4, but display the total credits for each of the students, along with the ID of the student. Don't bother about the name of the student. Don't bother about students who have not registered for any course, they can be omitted.
6. Find the names of all students who have taken any Comp. Sci. course ever. There should be no duplicate names.
7. Display the IDs, names of all instructors in Physics Department, and the course ids of courses taught by them. The result must also include instructors who haven't taught any course.
8. Display the IDs and names of all instructors who have never taught any course. (Interpret "taught" as "taught or is scheduled to teach").
    a. Do this using an OUTER JOIN
    b. Do this using a SQL set operator
9. For each instructor who taught or is scheduled to teach at least one course, print the name of the instructor and how many courses this instructor taught or is scheduled to teach. Sort the result in the increasing order of instructor names.
10. Rewrite Q9 so that only instructors who taught or are scheduled to teach at least 2 courses are printed.

Basic SQL on the database: Account Payable in user AP

11. Display the account numbers and account descriptions of general ledger accounts that were used in any invoice and have account descriptions ending with Advertising. Sort the result in the increasing order of account numbers.