

Indian Institute of Information Technology Allahabad, IIITA

DBMS

Date of Assignment : 27/01/21

Assignment-04

Date of submission: 29/01/21

Section –A,B,C

3.1. SQL queries using university database

Write the following inserts, deletes or updates in SQL, using the university schema.

- a. Increase the salary of each instructor in the Comp. Sci. department by 10%.
- b. Delete all courses that have never been offered (that is, do not occur in the section relation).
- c. Insert every student whose tot_cred attribute is greater than 100 as an instructor in the same department, with a salary of \$10,000.
- d. Display a list of all instructors, showing their ID, name, and the number of sections that they have taught. Make sure to show the number of sections as 0 for instructors who have not taught any section. Your query should use an outerjoin, and should not use scalar subqueries.
- e. Write the same query as above, but using a scalar subquery, without outerjoin.
- f. Display the list of all departments, with the total number of instructors in each department, without using scalar subqueries. Make sure to correctly handle departments with no instructors.
- g. Create a new course "CS-001", titled "Weekly Seminar", with 0 credits.
- h. Create a section of this course in Autumn 2017, with sec_id of 1.
- i. Enroll every student in the Comp. Sci. department in the above section.
- j. Delete enrollments in the above section where the student's name is Chavez.

3.2. Insurance database

Consider the following insurance database. Construct SQL queries for this relational database.

person(driver_id, name, address)

car(license, model, year)

accident(report_number, date, location)

owns(driver_id, license)

participated(report_number, license, driver_id, damage_amount)

- a. Find the total number of people who owned cars that were involved in accidents in 1989.
- b. Add a new accident to the database; assume any values for required attributes.
- c. Delete the Mazda belonging to "John Smith".
- d. Update the damage amount for the car with the license number "AABB2000" in the accident with report number "AR2197" to \$3000.