

Aim 1: Create a relational database schema for a Minor-Project, described by the following relations and Insert tuples.

STUDENT (Rollno, Name, Sem, Degree, Contact no, Guide\_No)

GUIDE (Guide\_name, Guide\_No, Guide\_research\_domain, Contact\_No, Email\_Id)

PROJECT (Project\_No, Project\_title, Project\_Area, Start\_dt, Guide\_No)

Specify the following queries in SQL on the database schema Minor\_Project.

- 1) Change the data type of attribute Rollno (Student Table), from Number (10) to Varchar2 (10).
- 2) Add a Check constraint on Gender attribute(Student Table) such that this attribute accept only ("M","F", "m","f") values.
- 3) Add a constraint on Degree (Student table), such that no null values be inserted.
- 4) Find the list of guide, who are guiding more than two student groups.
- 5) Find the list of project no, project name & name of guide, in domain of DataBase.
- 6) Show all different project area with total no of project associated with it.
- 7) Print the student detail along with their Guide details.

Aim 1: Create a relational database schema for a University, described by the following relations and Insert tuples.

CLASSROOM (Building, Room Number, capacity)

DEPARTMENT (Dept name, building, budget)

COURSE (Course id, title, dept name, credits)

INSTRUCTOR (I\_ID, name, dept name, salary)

SECTION (Course id, secid, semester, year, building, room number, time slot id)

Specify the following queries in SQL on the database schema University.

- 1) Increment Salary of each instructor by 10%, who is working in Department CSE.
- 2) Update the Room no for Course scheduled on 12.30-01.25 from RN-204 to RN-102.
- 3) Retrieve the names of all instructors, along with their department names.
- 4) Find the names of all instructors in the Computer Science department who have salary greater than Rs.70,000.
- 5) Show all the subjects which have assigned maximum credits.
- 6) Find the instructor name that is getting third highest salary.

Aim 1: Create a relational database schema for a Company, described by the following relations and Insert tuples.

Employee (F\_name, L\_name, Emp\_id, Bdate, Address, Gender, Salary,DNo)

Department (D\_name, Dno, D\_Mgr\_id, Mgr\_start\_date )

Dept\_Location(D\_no, D\_location )

Project (P\_name, P\_number, P\_location, D\_no )

Works\_on (Emp\_id, P\_no, Hours )

Dependent (Emp\_id, Dependent\_name, Gender, Bdate, Relationship)

Specify the following queries in SQL on the database Company

- 1) Company decided to give a raise on salaries of every employee, working on the "ProductX" project by 10 percent.
- 2) Find the names and address of all employees who work in same department.
- 3) Retrieve the name & employee id of employees, whose salary is between Rs.30,000 and Rs.40,000.
- 4) Find the names of all employees who are directly supervised by "Franklin"
- 5) List the name and address of all employees who work for the "Research" department.
- 6) List the names of employees who works on all project controlled by department number 5.