#### SET-I

Consider the following relational database. Give an expression in SQL foreach of the following queries.

employee (employee-name, street, city)

works (employee-name, company-name, salary)

company (company-name, city)

manages (employee-name, manager-name)

- Q1). Modify the database so that Jones now lives in Newtown.
- Q2). Give all employees of First Bank Corporation a 10 percent raise.

### SET-II

Consider the following relational database. Give an expression in SQL foreach of the following queries.

employee (employee-name, street, city)

works (employee-name, company-name, salary)

company (company-name, city)

manages (employee-name, manager-name)

- Q1). Give all managers of First Bank Corporation a 10 percent raise.
- Q2). Give all managers of First Bank Corporation a 10 percent raise unless the salary becomes greater than \$100,000; in such cases, give only a 3 percent raise.

### SET-III

Consider the following relational database. Give an expression in SQL foreach of the following queries.

employee (employee-name, street, city)

works (employee-name, company-name, salary)

company (company-name, city)

manages (employee-name, manager-name)

- Q1). Delete all tuples in the works relation for employees of Small Bank Corporation.
- Q2) Display the Name of the employee who have height salary than average salary of all employees.

## SET-IV

Consider the following insurance database, where the primary keys are underlined.

Construct the following 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 (driver-id, car, report-number, damage-amount)

- Q1). Find the total number of people who owned cars that were involved in accidents in 1989.
- Q2). Find the number of accidents in which the cars belonging to "John Smith" were involved.

# SET-V

Consider the following insurance database, where the primary keys are underlined.

Construct the following 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 (driver-id, car, report-number, damage-amount)

- Q1). Add a new accident to the database; assume any values for required attributes.
- Q2). Delete the Mazda belonging to "John Smith".

## SET-V1

Consider the following insurance database, where the primary keys are underlined.

Construct the following 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 (driver-id, car, report-number, damage-amount)

- Q1). Update the damage amount for the car with license number "AABB2000" in the accident with report number "AR2197" to \$3000
- Q2) How many damaged cars are there in the Year 1999.

### SET-VII

Consider the following database:

Employee (employee-name, street, city)

Works (employee-name, company-name, salary)

Company (company-name, city)

*Manager* (employee-name, manager-name)

Express the following query in SQL

- Q1) Find the name of employees whose salary is above 10k.
- Q2) Find the names of employees who are working as Managers

### SET-VIII

Write the SQL expressions for the following relational database:

Sailor (sailor id, Boat id, sailor name, rating, age)

Reserves (Sailor id, Boat id, Day)

Boat (boat id, Boat name, color)

- Q1) Find the age of the youngest sailor for each rating level.
- Q2) Find the age of the youngest sailor who is eligible to vote for each rating level with at lead two such sailors.

# SET-IX

Write the SQL expressions for the following relational database:

Sailor (sailor id, Boat id, sailor name, rating, age)

Reserves (Sailor id, Boat id, Day)

Boat (boat id, Boat name, color)

Q1) Find the number of reservations for each red boat.

Q2) Find the average age of sailor for each rating level that at least 2 sailors

# SET-X

Consider the following Relational schemas,

Sailors (sid: Integer, sname: String, age: Integer, rating: Integer)

Boats(bid: Integer, bname: String, bcolor: String)

Reserves(sid: Integer, bid: Integer, date: Date)

Q1) Write a query to find the names of sailors with age over 20 years and not reserved a red color boat

Q2) Write a query to find the age of the youngest sailor for each rating level