**Lab Assignment-5**

Q.1) A database is having information related to insurance details of car. The Person table stores name, driverid and address. The Car table has unique registration number, model (make of car) and year (car purchasing year). Car gets insurance in case of accident happens. The Accident table is described with details of reportnumber, date of accident and location. The Owns table has driverid and registrationno of the car. Claiming to the insurance company requires some details, which is stored in Participated table. The Participated table has reportnumber, registrationno of the car, driverid and damage amount.

The schemas of tables are given below

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***person*** *(driver-id, name, address)*

***car*** *(car-registration-no, model, year)*

***accident*** *(report-number, date, location)*

***owns*** *(driver-id, car-registration-no)*

***participated*** *(report-number, car-registration-no, driver-id, damage-amount)*

*Note:*

Primary key in each relation is underlined.

participated.driver-id is foreign key referencing to person.driver-id

participated.report-number is foreign key referencing to accident.report-number

owns.driver-id is foreign key referencing to person.driver-id

owns.registration\_id is foreign key referencing to car.registration\_id

Write the following SQL queries with respect to above information:-

a) Find the total number of people who owned cars that were involved in accidents in 2018.

b) Find the number of accidents in which the cars belonging to “John Smith” were involved.

c) Add a new accident to the database; assume any values for required attributes.

d) Delete the “Hyundai” belonging to “John Smith”.

e) Update the damage amount for the car with license number “AABB2000” in the accident with report number “AR2197” to $3000.

f) Display total no. of accident along with the report date.

g) Find the names of person whose date of accident was similar.

h) Find the names, address and location of all persons whose damage-amount is greater than 2200.

Q.2. A Employee Database consists of details of employees like their company details, manager

information, salary etc. The Employee table stores employee name, street and city. The Works relation has employee name, company name and salary. The Company table has company name and city. The Manages relation includes manager name along with the employee name. In the Employee table in case of repetition of names, one can attach some numbers (eg: john22) to distinguish from previous entries.

The schemas of tables are given below:

***employee****(employee-name, street, city)*

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

***company****(company-name, city)*

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

Note:

Primary key in each relation is underlined

works.employee-name is foreign key referencing to employee.employee-name

works.company-name is foreign key referencing to company.company-name

manages.employee-name is foreign key referencing to employee.employee-name

manages.manager-name is foreign key also referencing to employee.employee-name. Also

employeename value is not duplicated.

Write the following SQL queries with respect to above information:-

a) Find the names of all employees who work for First Bank Corporation.

b) Find the names and cities of residence of all employees who work for First Bank Corporation.

c) Find the names, street, address, and cities of residence for all employees who work for 'First Bank Corporation' and earn more than $10,000.

d) Find the names of all employees in the database who live in the same cities for which they work.

e) Find the names of all employees in the database who live in the same cities and on the same streets as do their managers.

f) Find the names of all employees in the database who do not work for 'First Bank Corporation'. Assume that all people work for exactly one company.

g) Find the names of all employees in the database who earn more than every employee of 'Small Bank Corporation'. Assume that all people work for at most one company

h) Assume that the companies may be located in several cities. Find all companies located in every city in which 'Small Bank Corporation' is located.

i) Find the names of all employees who earn more than the average salary of all employees of their company. Assume that all people work for at most one company.

j) Find the company that has the most employees.

k) Find the name of the company that has the smallest payroll.

l) Find those companies whose employees earn a higher salary, on average, than the average salary at First Bank Corporation.