## **LAB 5: Declarative Programming Paradigm**

## **Practice(Optional):**

- 1. Write a SQL lites statement to create a table names as employees including columns employee\_id, first\_name, last\_name, email, phone\_numberhire\_date, job\_id, salary, commission, manager\_id and department\_id
  - i) Insert values in the table and also execute the table structure
  - ii) Display the first name, last name of an employees whose salary is greater than 25,000
- 2. Create a table for Student with the following fields (Reg\_no,stud\_name,sex, and create a table Dept with the following fields(dept\_no primary key, dept\_name)
  - a. Insert sample records and do the following
  - b. Display the student reg\_no,name and dept\_name
  - c. Display the student names ending with 'ka'
  - d. Display all the female students name
  - e. Display the student names by descending order

## **Graded:**

1. Create the below table and execute the insert, update and the below select statements.

recipes.recipes
id: int(11)
name: varchar(400)
description: text
category\_id: int(11)
chef\_id: int(255)
created: datetime

- i) Write a query to display the total number of recipes available with the description "Chinese"
- ii) Write a query to display the id, name of the recipes with chef\_id 'BL000002'.
- iii) Write a query to display the description of the recipes whose name begins with 'P'.
- 2. Create a table movie of the below structure and assume data types.Movie\_ID,

Movie\_Name, Genre, Language, Rating ,Do the following queries

- a. Update the movies rating by 10% and display it
- b. Delete the movies with movie id 102
- c. Select movies whose rating is more than 3.
- 3. Create a course database with the following fields Product(ID, Prod\_name, Supplier\_id,Unit\_price,Package,OrderID),OrderItem(ID,Order\_id,Product\_id,Unit\_price, Quantity) using Foreign key
  - d. Display the total quantity of every product in the stock
  - e. Sort the Unit\_price based on the supplier\_id
  - f. Display the Product\_name along with order\_id and supplier\_id

- 4. Write a SQL lite3 statement to create a table named as job including columns job\_id,job\_title,Min-salary,Max\_salary.job\_id column does not contain any duplicate value at the time of insertion
- 5. Write a SQL lite3 statement to create a table names as job\_history including columns employee\_id, start\_date, end\_date, job\_id and department\_id and make sure that, the employee\_id column does not contain any duplicate value at the time of insertion and the foreign key column job\_id contain only those values which are exists in the jobs table.

## **Advanced: (Optional, More queries to practice)**

- 1. Write a SQL lite 3 statement to create a table worker (WORKER\_ID ,F\_NAME , L\_NAME ,SALARY ,JOINING\_DATE ,DEPT)with appropriate data type and insert values in the table . Do the following,
  - g. Write an SQL query to fetch "FIRST\_NAME" from Worker table using the alias name as <WORKER NAME>
  - **h.** Write an SQL query to fetch "F\_NAME" (First name) from Worker table in upper case.
  - i. Write an SQL query to fetch unique values of DEPARTMENT from Worker table
  - **j.** Write an SQL query to print the first three characters of F\_NAME (First Name)from Worker table.
  - **k.** Write an SQL query to find the position of the alphabet ('a') in the first name column for ex: 'Adam' from Worker table.
  - **l.** Write an SQL query that fetches the unique values of DEPT from Worker table and prints its length.
  - **m.** Write an SQL query to print all Worker details from the Worker table order by F\_NAME Ascending
  - **n.** Write an SQL query to print details of workers excluding F\_Name(First name), for example "ram" and "Sam" from Worker table.
  - **o.** Write an SQL query to print details of the Workers whose F\_NAME ends with 'h' and contains 4 alphabets
  - **p.** Write an SQL query to print details of the Workers whose Salary lies between 100000 and 500000.
  - **q.** Write an SQL query to fetch the count of employees working in the department 'Administration'.
  - **r.** Write an SQL query to fetch duplicate records having matching data in some fields of a table.
  - s. Write an SQL query to show the second highest salary from a table
  - **t.** Write an SQL query to fetch the first 50% records from a table.
  - u. Write an SQL query to show the total average salary of all the employees