# **EXERCISES**

### **Exercise 1:**

#Create table employee with the following constraints;

CREATE TABLE employee(emp id, emp name, emp dept emp age, place, income);

Set emp id as the primary key with auto increment starting from 2505.

# insert records into the table

Load "employee.csv" (from tables folder) data into employee table

## **Questionnaire set:**

- 1. Calculate the total number of employees name available in the table
- 2. Display the maximum salary of each department and also all departments put together
- 3. Find the employees whose salary is between 100000 and 500000 but not exactly 120000.
- 4. Get the count of employees whose income is more than 1 lakh.
- 5. List the employees according to ascending order of salary
- 6. For each department, retrieve the department name, the number of employees in the department, and Maximum income for the department.
- 7. List the number of employees in each place.
- 8. List the number of customers in each country sorted high to low
- 9. List the number of customers in each place. (Only include places with more than 1 employee)
- 10. List the number of employees in each place, except the California, sorted high to low. Only include places with 2 or more employees

#### Exercise2:

Tables for Exercise2

- 1. Create table customer (customer\_name char(20),customer\_street char(30),customer\_city char(30),PRIMARY KEY(customer\_name));
- 2. Create table branch (branch\_name char(15),branch\_city char(30),assets numeric(16,2),PRIMARY KEY(branch\_name));
- 3. Create table account (account\_number char(15),branch\_name char (15),balance numeric(12,2),PRIMARY KEY(account\_number),FOREIGN KEY (branch\_name) REFERENCES branch(branch\_name));
- 4. Create table depositor(customer\_name char(20),account\_number char(10),PRIMARY KEY(customer\_name,account\_number),FOREIGN KEY (customer\_name) REFERENCES customer(customer\_name),FOREIGN KEY (account\_number) REFERENCES account(account\_number));
- 5. Create table loan(loan\_number varchar(6),branch\_name char(15),amount int,PRIMARY KEY(loan\_number),FOREIGN KEY (branch\_name) REFERENCES branch(branch\_name));

6. Create table borrower(customer\_name char(20),loan\_number varchar(6),PRIMARY KEY(customer\_name,loan\_number),FOREIGN KEY (customer\_name) REFERENCES customer(customer\_name),FOREIGN KEY (loan\_number) REFERENCES loan(loan\_number));

## **Questionnaire set:**

- 1. Create the tables for above schema and load data from the respective .csv files
- 2. For all customers who have loan from the bank, find their names, loan numbers and loan amount (with and without renaming tables)
- 3. Find the customer names, loan numbers and loan amounts for all loans at perryridge branch.
- 4. Find the names of all branches that have assets greater than at least one branch located at Brooklyn.
- 5. List in alphabetical order all customers who have loans at the perryridge branch.
- 6. Print the entire Loan relation in descending order of amount. If several loans have the same amount, order them in ascending order by loan number.
- 7. Find the average balance for all accounts.
- 8. Find no. of tuples in customer relation.
- 9. Find the total of all loan amounts.
- 10. Find the average account balance at the Perryridge branch.
- 11. Find the average account balance at each branch.
- 12. Find the average account balance at each branch ,where the account balance is more than 1200.
- 13. Find the number of depositors for each branch.
- 14. Find the average balance for each customer who lives in "Harrison" and has at least 3 accounts