Assignment:

The mail-order database consists of the relations defined in the six schemes shown below:

EMPLOYEES (ENO, ENAME, ZIP, HDATE)
PARTS (PNO, PNAME, QOH, PRICE, LEVEL)
CUSTOMERS (CNO,CNAME,STREET,ZIP,PHONE)
ORDERS(ONO,CNO,ENO,PRECEIVED,SHIPPED)
ODETAILS(ONO, PNO, QTY)
ZIPCODES(ZIP, CITY)

Where

- *The EMPLOYEES relation contains information about the employees of the company. The NO attribute is the primary key. The ZIP attribute is a foreign key referring to the ZIP-CODES table.
- *The PARTS relation keeps a record of the inventory of the company. The record for each part includes its number and name as well as the quantity on hand, unit price and the re-order level. PNO is the primary key for the relation.
- *The CUSTOMERS relation contains information about the customers of the mail-order company. Each customer is assigned a customer number, CNO, which serves as the primary key. The ZIP attribute is a foreign key referring to the ZIPCODES relation.
- *The ORDERS relation contains information about the orders placed by customers, the employee who took the order, and the dates the order was received and shipped. ONO is the primary key. The CNO attribute is a foreign key referring to the CUSTOMERS relation, and the ENO attribute is a foreign key referring to the EMPLOYEES table.
- *The ODETAILS relation contains information about the various parts ordered by the customers within a particular order. The combination of the ONO and PNO attributes forms the primary key. The ONO attribute is a foreign key referring to the ORDERS relation, and the PNO attribute is a foreign key referring to the PARTS relation.
- *The ZIPCODES relation maintains information about the zip codes for various cities.ZIP is the primary key.

Create the above database using SQL commands and write the following SQL queries with corresponding Outputs for the following:

- 1. Get PNO & PNAME values of parts that are priced less than 20.
- 2. Get PNO values for parts for which orders have been placed.
- 3. Get all the details of customers whose names begin with the letter "S".
- 4. Get the ONO & CNAME values for customers whose orders have not yet been shipped.
- 5. Get CNAME & ENAME pairs such the customer with name CNAME has placed and ordered through the employees with name ENAME.
- 6. Get the name of employees who was hired on the earliest date.

- 7. Retrieve the part number, part name and price of parts with price greater than 20000 in an ascending order of part number.
- 8. For each part, get PNO & PNAME values along with total sales.
- 9. Get the total quantity of parts 10601 that has been ordered.
- 10. Get the ENO values of employees from city "Mumbai".

SET OPERATIONS.

Assignment:

Create the following Tables:

"Customers" table

| CustomerID | CustomerName | ContactNam | Address | City | PostalCode | Country |
|------------|----------------|--------------|-----------|-------|------------|---------|
| | | e | | | | |
| 1 | Alfreds Futter | Maria | Obere | Berli | 12209 | Germany |
| | | Anders | Str.57 | n | | |
| 2 | Ana helados | Ana Trujillo | Avda. | Mex | 05021 | Mexico |
| | | | Construct | ico | | |
| | | | ion 2222 | D.F | | |
| 3 | Antonio Moreno | Antonio | Matadero | Mex | 05023 | Mexico |
| | | Moreno | s 2312 | ico | | |
| | | | | D.F | | |

"Suppliers" table

| SupplierID | SupplierName | ContactName | Address | City | PostalCode | Country |
|------------|----------------|---------------|----------|--------|------------|---------|
| 1 | Exotic Liquid | Charlotte | 49 | Berlin | 12209 | Germany |
| | _ | Cooper | Gilbert | | | |
| | | _ | St. | | | |
| 2 | New Orleans | Shelley Burke | P.O. Box | Mexico | 05023 | Mexico |
| | Cajun Delights | - | 78934 | D.F. | | |
| 3 | Grandma | Regina | 707 | Ann | 48104 | USA |
| | Kelly's | Murphy | Oxford | Arbor | | |
| | Homestead | | Rd. | | | |

Write SQL queries with corresponding Outputs for the following:

- 1. Selects all the different cities (only distinct values) from the "Customers" and the "Suppliers" tables
- 2. Select all cities from the "Customers" and "Suppliers" tables.
- 3. Select all German cities from the "Customers" and "Suppliers" tables.
- 4. Select all Customer name and supplier name from "Customers" tables where city name is common in both.
- 5. Select all country names from Supplier Table which don't have any customer in customer table from its own country.