SQL Exercise 1

1. Create the table SEMP with the following structure:-

EMPNO CHAR(4)

EMPNAME CHAR(20)

BASIC FLOAT

DEPTNO CHAR(2)

DEPTHEAD CHAR(4)

Ans

create table SEMP(

   -> EMPNO CHAR(4),

   -> EMPNAME CHAR(20),

   -> BASIC FLOAT,

   -> DEPTNO CHAR(2),

   -> DEPTHEAD CHAR(4));

2. Create the table SDEPT with the following structure:-

DEPTNO CHAR(2)

DEPTNAME CHAR(15)

Ans

  create table SDEPT(

   -> DEPTNO CHAR(2),

   -> DEPTNAME CHAR(15));

3. Insert into the SDEPT table the following values:-

10, Development

20, Training

Ans: insert into SDEPT values

   -> (10, 'Development'),

-> (20, 'Training');

4. Insert into the SEMP table the following values:-

0001, SUNIL, 6000, 10

0002, HIREN, 8000, 20

0003, ALI, 4000, 10, 0001

0004, GEORGE, 6000, 0002

  Ans:
insert into SEMP values

   -> (0001, 'SUNIL', 6000, 10,null),

   -> (0002, 'HIREN', 8000, 20,null),

   -> (0003, 'ALI', 4000, 10, 0001),

   -> (0004, 'GEORGE', 6000,null, 0002);

Create S, P, J, SPJ tables as specified below and insert a few rows in each table:-

  SUPPLIER

(S#, Sname, Status, City)   -   S

  PARTS

(P#, Pname, Color, Weight, City)   -   P

  PROJECTS

(J#, Jname, City)   -   J

  SUPPLIER-PARTS-PROJECT

(S#, P#, J#, Qty)

   -   SPJ

Sample data for S# column:- 'S1', 'S2', 'S3', etc.

Sample data for P# column:- 'P1', 'P2', 'P3', etc.

Sample data for J# column:- 'J1', 'J2', 'J3', etc.

Sample data for Status column:- 10, 20, 30, etc.

Write the SELECT queries to do the following:-

5. Display all the data from the S table.

Ans: Select* from SUPPLIER;

```
+------+-----------+--------+--------+
| S#   | Sname     | Status | City   |
+------+-----------+--------+--------+
| S1   | Supplier1 |     10 | London |
| S2   | Supplier2 |     20 | Paris  |
| S3   | Supplier3 |     30 | Athens |
+------+-----------+--------+--------+
3 rows in set (0.00 sec)
```

6. Display only the S# and SNAME fields from the S table.

Ans: select `S#`,SNAME from SUPPLIER;

```
+------+-----------+
| S#   | SNAME     |
+------+-----------+
| S1   | Supplier1 |
| S2   | Supplier2 |
| S3   | Supplier3 |
+------+-----------+
3 rows in set (0.00 sec)
```
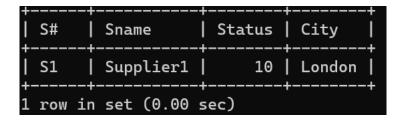
7. Display the PNAME and COLOR from the P table for the CITY="London".

Ans: SELECT Pname, Color FROM PARTS WHERE City = 'London';

```
+-------+-------+
| Pname | Color |
+-------+-------+
| Part1 | Red   |
+-------+-------+
1 row in set (0.00 sec)
```

8. Display all the Suppliers from London.

Ans: select* Suppliers where City = 'London';

```
+------+-----------+--------+--------+
| S#   | Sname     | Status | City   |
+------+-----------+--------+--------+
| S1   | Supplier1 |     10 | London |
+------+-----------+--------+--------+
1 row in set (0.00 sec)
```

9. Display all the Suppliers from Paris or Athens.

Ans: select * from Supplier where City in ('Paris','Athens');

```
+------+-----------+--------+--------+
| S#   | Sname     | Status | City   |
+------+-----------+--------+--------+
| S2   | Supplier2 |     20 | Paris  |
| S3   | Supplier3 |     30 | Athens |
+------+-----------+--------+--------+
2 rows in set (0.01 sec)
```

10. Display all the Projects in Athens.

Ans: select * from PROJECTS where City='Athens';

```
+------+----------+--------+
| J#   | Jname    | City   |
+------+----------+--------+
| J2   | Project2 | Athens |
+------+----------+--------+
1 row in set (0.00 sec)
```

11. Display all the Partnames with the weight between 12 and 14 (inclusive of both).

Ans: select Pname from Parts where Weight between 12 and 14;

```
+-------+
| Pname |
+-------+
| Part1 |
| Part2 |
| Part3 |
+-------+
```

12. Display all the Suppliers with a Status greater than or equal to 20.

Ans: select * from SUPPLIER where Status >= 20;

```
+------+-----------+--------+--------+
| S#   | Sname     | Status | City   |
+------+-----------+--------+--------+
| S2   | Supplier2 |     20 | Paris  |
| S3   | Supplier3 |     30 | Athens |
+------+-----------+--------+--------+
```

13. Display all the Suppliers except the Suppliers from London.

Ans: select * from SUPPLIER where City <> 'London';

```
+------+-----------+--------+--------+
| S#   | Sname     | Status | City   |
+------+-----------+--------+--------+
| S2   | Supplier2 |     20 | Paris  |
| S3   | Supplier3 |     30 | Athens |
+------+-----------+--------+--------+
```

14. Display only the Cities from where the Suppliers come from.

Ans: Select City from SUPPLIER;

```
+--------+
| City   |
+--------+
| London |
| Paris  |
| Athens |
+--------+
```

15. Assuming that the Part Weight is in GRAMS, display the same in MILLIGRAMS and KILOGRAMS.

Ans: select Pname, Weight*1000 as MILLIGRAMS, Weight/1000 as KILOGRAMS from PARTS;

```
+--------+------------+-----------+
| Pname  | MILLIGRAMS | KILOGRAMS |
+--------+------------+-----------+
| Part1  |   12500.00 |  0.012500 |
| Part2  |   13000.00 |  0.013000 |
| Part3  |   14000.00 |  0.014000 |
+--------+------------+-----------+
```