Create the table SEMP with the following structure:-

EMPNO CHAR(4)
 EMPNAME
CHAR(20)
BASIC FLOAT
 DEPTNO CHAR(2)
DEPTHEAD CHAR(4)

```
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)

```
CREATE TABLE SDEPT (
   ->    DEPTNO CHAR(2),
   ->    DEPTNAME CHAR(15)
   -> );
```

3. Insert into the SDEPT table the following values:-
10, Development
 20, Training

```
INSERT INTO SDEPT (DEPTNO, DEPTNAME) 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

```
INSERT INTO SEMP (EMPNO, EMPNAME, BASIC, DEPTNO, DEPTHEAD) VALUES
   -> ('0001', 'SUNIL', 6000, '10', NULL),
   -> ('0002', 'HIREN', 8000, '20', NULL),
   -> ('0003', 'ALI', 4000, '10', '0001'),
   -> ('0004', 'GEORGE', 6000, '20', '0002');
```

Create S, P, J, SPJ tables as specified below and insert a few rows in each table:-
SUPPLIER
(S#, Sname, Status, City) - S


```
CREATE TABLE S (
    ->    SNUM CHAR(2),
    ->    SNAME CHAR(20),
    ->    STATUS INT,
    ->    CITY CHAR(20)
    -> );
```


```
INSERT INTO S (`S#`, Sname, Status, City) VALUES
    -> ('S1', 'Smith', 20, 'London'),
    -> ('S2', 'Jones', 30, 'Paris'),
    -> ('S3', 'Blake', 10, 'New York');
Query OK, 3 rows affected (0.01 sec)
```


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


```
CREATE TABLE P (
    ->    `P#` CHAR(2),       -- Part Number
    ->    Pname CHAR(20),     -- Part Name
    ->    Color CHAR(10),     -- Part Color
    ->    Weight FLOAT,       -- Part Weight
    ->    City CHAR(20)       -- Part's City
    -> );
```

```
INSERT INTO P (`P#`, Pname, Color, Weight, City) VALUES
   -> ('P1', 'Bolt', 'Red', 12.5, 'London'),
   -> ('P2', 'Nut', 'Blue', 3.5, 'Paris'),
   -> ('P3', 'Screw', 'Green', 1.5, 'New York');
```

PROJECTS (J#, Jname, City) - J
```
CREATE TABLE J (
   ->   `J#` CHAR(2),        -- Project Number
   ->   Jname CHAR(20),      -- Project Name
   ->   City CHAR(20)    )   -- Project's City
```

```
INSERT INTO J (`J#`, Jname, City) VALUES
   -> ('J1', 'Bridge', 'London'),
   -> ('J2', 'Building', 'Paris'),
   -> ('J3', 'Road', 'New York');
```

SUPPLIER-PARTS-PROJECT (S#, P#, J#, Qty) – SPJ
```
CREATE TABLE SPJ (
   ->   `S#` CHAR(2),        -- Supplier Number (from S table)
   ->   `P#` CHAR(2),         -- Part Number (from P table)
   ->   `J#` CHAR(2),        -- Project Number (from J table)
   ->   Qty INT           -- Quantity of parts supplied
   -> );
```

```
INSERT INTO SPJ (`S#`, `P#`, `J#`, Qty) VALUES
   -> ('S1', 'P1', 'J1', 300),
   -> ('S2', 'P2', 'J2', 400),
   -> ('S3', 'P3', 'J3', 500);
```

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

```
mysql> select * from s;
+------+-------+--------+----------+
| S#   | Sname | Status | City     |
+------+-------+--------+----------+
| S1   | Smith |     20 | London   |
| S2   | Jones |     30 | Paris    |
| S3   | Blake |     10 | New York |
+------+-------+--------+----------+
3 rows in set (0.01 sec)
```

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

```
mysql> select * from s;
+------+-------+--------+----------+
| S#   | Sname | Status | City     |
+------+-------+--------+----------+
| S1   | Smith |     20 | London   |
| S2   | Jones |     30 | Paris    |
| S3   | Blake |     10 | New York |
+------+-------+--------+----------+
3 rows in set (0.01 sec)
```

```
mysql> SELECT S#, Sname  from s;
    -> ^C
mysql> SELECT `S#`, Sname  from s;
+------+-------+
| S#   | Sname |
+------+-------+
| S1   | Smith |
| S2   | Jones |
| S3   | Blake |
+------+-------+
3 rows in set (0.00 sec)
```

7. Display the PNAME and COLOR from the P table for the CITY="London".

```
mysql> select pname ,color from p;
+-------+-------+
| pname | color |
+-------+-------+
| Bolt  | Red   |
| Nut   | Blue  |
| Screw | Green |
+-------+-------+
rows in set (0.00 sec)
```

8. Display all the Suppliers from London.

```
ysql> select *  from s where city ='london';
+------+-------+--------+--------+
| S#   | Sname | Status | City   |
+------+-------+--------+--------+
| S1   | Smith |     20 | London |
+------+-------+--------+--------+
 row in set (0.00 sec)
```

9. Display all the Suppliers from Paris or Athens.

```
mysql> select *  from s where city ='london';
+------+-------+--------+--------+
| S#   | Sname | Status | City   |
+------+-------+--------+--------+
| S1   | Smith |     20 | London |
+------+-------+--------+--------+
1 row in set (0.00 sec)
```

10. Display all the Projects in Athens.

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

```
mysql> SELECT PNAME
    -> FROM P
    -> WHERE WEIGHT BETWEEN 12 AND 14;
+-------+
| PNAME |
+-------+
| Bolt  |
+-------+
```

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

```
ysql> select * from s where status >= 20;
------+-------+--------+--------+
 S#   | Sname | Status | City   |
------+-------+--------+--------+
 S1   | Smith |     20 | London |
 S2   | Jones |     30 | Paris  |
------+-------+--------+--------+
rows in set (0 00 sec)
```

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

```
ysql> select * from s where city!="London";
------+-------+--------+----------+
 S#   | Sname | Status | City     |
------+-------+--------+----------+
 S2   | Jones |     30 | Paris    |
 S3   | Blake |     10 | New York |
------+-------+--------+----------+
```

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

```
ysql> SELECT DISTINCT CITY
    -> FROM S;
----------+
 CITY     |
----------+
 London   |
 Paris    |
 New York |
----------+
 rows in set (0.01 sec)
```

This query returns a list of all the cities where suppliers are located, with no duplicates

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

MILLIGRAMS and KILOGRAMS.

```
mysql> SELECT PNAME,
    ->        WEIGHT * 1000 AS WEIGHT_IN_MILLIGRAMS,
    ->        WEIGHT / 1000 AS WEIGHT_IN_KILOGRAMS
    -> FROM P;
+--------+----------------------+---------------------+
| PNAME  | WEIGHT_IN_MILLIGRAMS | WEIGHT_IN_KILOGRAMS |
+--------+----------------------+---------------------+
| Bolt   |                12500 |              0.0125 |
| Nut    |                 3500 |              0.0035 |
| Screw  |                 1500 |              0.0015 |
+--------+----------------------+---------------------+
3 rows in set (0.01 sec)
```