**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)**

create table SEMP

-> (empno char(4),

-> empname char(20),

-> basic float,

-> deptno char(2),

-> depthhead char(4));

desc semp;

+-----------+----------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-----------+----------+------+-----+---------+-------+

| empno | char(4) | YES | | NULL | |

| empname | char(20) | YES | | NULL | |

| basic | float | YES | | NULL | |

| deptno | char(2) | YES | | NULL | |

| depthhead | char(4) | YES | | NULL | |

+-----------+----------+------+-----+---------+-------+

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

**DEPTNO CHAR(2)**

**DEPTNAME CHAR(15)**

create table SDEPT(

-> deptno char(2),

-> dwptname char(15));

desc sdept;

+----------+----------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+----------+----------+------+-----+---------+-------+

| deptno | char(2) | YES | | NULL | |

| dwptname | char(15) | YES | | NULL | |

+----------+----------+------+-----+---------+-------+

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

**10, Development**

**20, Training**

insert into sdept values (10, "developement");

insert into sdept values (20, "tranning");

select \* from sdept;

+--------+--------------+

| deptno | deptname |

+--------+--------------+

| 10 | developement |

| 20 | tranning |

+--------+--------------+

**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 values

-> ("0001",'sunil',6000,10,null),

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

-> ('003','ali',4000,'10','0001'),

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

select \* from semp;

+-------+---------+-------+--------+-----------+

| empno | empname | basic | deptno | depthhead |

+-------+---------+-------+--------+-----------+

| 0001 | sunil | 6000 | 10 | NULL |

| 0002 | hiren | 8000 | 20 | NULL |

| 003 | ali | 4000 | 10 | 0001 |

| 0004 | george | 6000 | NULL | 0002 |

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**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**

create table s(

-> s char(2) primary key,

-> sname char(10),

-> status enum('A','NA'),

-> city char(15));

Query OK, 0 rows affected (0.02 sec)

mysql> desc s;

+--------+----------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+--------+----------------+------+-----+---------+-------+

| s | char(2) | NO | PRI | NULL | |

| sname | char(10) | YES | | NULL | |

| status | enum('A','NA') | YES | | NULL | |

| city | char(15) | YES | | NULL | |

+--------+----------------+------+-----+---------+-------+

create table p (

-> p char(2) primary key,

-> pname char(10),

-> colour char(10),

-> weight float,

-> city char(15));

Query OK, 0 rows affected (0.02 sec)

mysql> desc p;

+--------+----------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+--------+----------+------+-----+---------+-------+

| p | char(2) | NO | PRI | NULL | |

| pname | char(10) | YES | | NULL | |

| colour | char(10) | YES | | NULL | |

| weight | float | YES | | NULL | |

| city | char(15) | YES | | NULL | |

+--------+----------+------+-----+---------+-------+

create table j(

-> j char(2),

-> jname char(10),

-> city char(15));

Query OK, 0 rows affected (0.02 sec)

mysql> desc j;

+-------+----------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+----------+------+-----+---------+-------+

| j | char(2) | YES | | NULL | |

| jname | char(10) | YES | | NULL | |

| city | char(15) | YES | | NULL | |

+-------+----------+------+-----+---------+-------+

**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.**

>select \* from s;

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

>select s, sname from s;

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

>select pname , colour from p where city='london';

**8. Display all the Suppliers from London.**

>select \* from s where city = "london";

**9. Display all the Suppliers from Paris or Athens.**

>select \* from s where city ="paris" or city = "athens";

**10. Display all the Projects in Athens.**

>select \* from p where city = 'athens';

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

>select pname from p where weight between 12 and 14 ;

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

> select \* from s where status >= 20 ;

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

>select \* from s where city not like 'london';

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

>select distinct(city) from s;

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

>select weight, weight\*10 as miligram , weight/1000 as kilogram from p;