PRACTICAL: -9

Aim: - implement the grouping clauses group by, order by & having.

SQL> create table customers (cid int, cname varchar (50), country varchar (50));

```
SQL> create table customers(cid int, cname varchar(50), country varchar(50));

Table created.

SQL> desc table customers;
Usage: DESCRIBE [schema.]object[@db_link]
SQL> desc customers;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 CID                                                NUMBER(38)
 CNAME                                              VARCHAR2(50)
 COUNTRY                                            VARCHAR2(50)
```

SQL> insert into customers values (1, 'rupa', 'India');

SQL> insert into customers values (2, 'rasi', 'India');

SQL> insert into customers values (3, 'Ramu', 'India');

SQL> insert into customers values (4, 'raja', 'Japan');

SQL> insert into customers values (5, 'Uma', 'Japan');

SQL> insert into customers values (6, 'Amit', 'Japan');

SQL> insert into customers values (7, 'Ravi', 'Japan');

SQL> insert into customers values (8, 'Upendra', 'USA');

SQL> insert into customers values (9, 'Bose', 'USA');

SQL> insert into customers values (10, 'Surya' , 'UK');

SQL> insert into customers values (11, 'Srihari', 'UK');

```
SQL> select * from customers;

       CID CNAME
---------- ------------------------
COUNTRY
------------------------------------
         1 rupa
india

         2 rasi
india

         3 ramu
india


       CID CNAME
---------- ------------------------
COUNTRY
------------------------------------
         4 raju
japan

         5 uma
japan

         6 amit
japan
```

```
       CID CNAME
---------- ------------------------
COUNTRY
------------------------------------
         7 ravi
japan

         8 uppendra
USA

         9 bose
USA


       CID CNAME
---------- ------------------------
COUNTRY
------------------------------------
        10 surya
UK

        11 srihari
UK
```

SQL> select count(cid), country from customers group by country;

```
SQL> select count(cid),country from customers group by country;

COUNT(CID) COUNTRY
---------- ----------------------------------------
         3 india
         4 japan
         2 USA
         2 UK
```

SQL> select count(cid), country from customers group by country HAVING COUNT (cid) <3;

```
SQL> select count(cid),country from customers group by  country HAVING COUNT(cid) <3;

COUNT(CID) COUNTRY
---------- ----------------------------------------
         2 USA
         2 UK
```

SQL> select count(cid), country from customers group by country HAVING COUNT(cid) >=2;

```
SQL> select count(cid),country from customers group by  country HAVING COUNT(cid) >=2;

COUNT(CID) COUNTRY
---------- ----------------------------------------
         3 india
         4 japan
         2 USA
         2 UK
```

SQL> select cid, cname from customers order by cid asc;

```
SQL> select cid , cname from customers order by cid asc;

       CID CNAME
---------- ----------------------------------------
         1 rupa
         2 rasi
         3 ramu
         4 raju
         5 uma
         6 amit
         7 ravi
         8 uppendra
         9 bose
        10 surya
        11 srihari

11 rows selected.
```

SQL> select cid, cname from customers order by cid desc;

```
SQL> select cid , cname from customers order by cid desc;

       CID CNAME
---------- ----------------------------------------
        11 srihari
        10 surya
         9 bose
         8 uppendra
         7 ravi
         6 amit
         5 uma
         4 raju
         3 ramu
         2 rasi
         1 rupa

11 rows selected.
```

SQL> select cid, cname from customers order by cid asc, cname desc;

```
SQL> select cid , cname from customers order by cid asc,cname desc;

       CID CNAME
---------- ----------------------------------------
         1 rupa
         2 rasi
         3 ramu
         4 raju
         5 uma
         6 amit
         7 ravi
         8 uppendra
         9 bose
        10 surya
        11 srihari

11 rows selected.
```