EXP 8

SET OPERATORS

AIM: To execute Set operators in SQL.

1)CREATE TABLE EMPLOYEE AND DEPARTMENT AND

```
SQL> create table EMP402 (Ename varchar2(20), DeptId number(2));

Table created.

SQL> create table Department402 (DeptId number(2), DeptName varchar(15));

Table created.

SQL> desc EMP402;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 ENAME                                              VARCHAR2(20)
 DEPTID                                             NUMBER(2)

SQL> desc Department402;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 DEPTID                                             NUMBER(2)
 DEPTNAME                                           VARCHAR2(15)
```

2) Display all the dept numbers available with the dept and emp tables avoiding duplicates.

(SELECT DeptId FROM EMP402) UNION (SELECT DeptId FROM Department402);

```
SQL> (SELECT DeptId FROM EMP402) UNION (SELECT DeptId FROM Department402);

    DEPTID                                    |
----------
         1
         2
         3
        10
        18
        21
        69

7 rows selected.
```

3) Display all the dept numbers available with the dept and emp tables.

(SELECT DeptId FROM EMP402) UNION ALL (SELECT DeptId FROM Department402);

```
SQL> (SELECT DeptId FROM EMP402) UNION ALL (SELECT DeptId FROM Department402);

    DEPTID
----------
         1
        21
         2
        10
         3
         1
         2
         3
        69
        18

10 rows selected.
```

4) Display all the dept numbers available in emp and not in dept tables and vice versa. Solution

```
SQL> (SELECT DeptId FROM EMP402) MINUS (SELECT DeptId FROM
  2  Department402);

    DEPTID
----------
        10
        21

SQL> (SELECT DeptId FROM Department402) MINUS (SELECT DeptId FROM
  2  EMP402);

    DEPTID
----------
        18
        69
```

VIEWS

AIM: To execute Views in SQL.

1)CREATE MARKS TABLE

```
SQL> SELECT * FROM MMARKS;

NAME                                  SUBJECT                    MARKS GRADE
------------------------------------  --------------------       ---------- -----
CHITRA                                MATH                          98 A
JAGGU                                 SCIENCE                       54 E
MEERA                                 PHYSICS                       85 B
GOUTHAM                               CHEMISTRY                     79 C
NAINA                                 SOCIAL                        65 D
SIDDU                                 ENGLISH                       59 E

6 rows selected.

SQL> DESC MMARKS;
 Name                                  Null?    Type
 ------------------------------------  -------- --------------------------------
 NAME                                  NOT NULL VARCHAR2(40)
 SUBJECT                               NOT NULL VARCHAR2(20)
 MARKS                                 NOT NULL NUMBER(12)
 GRADE                                 NOT NULL CHAR(5)
```

2) CREATE MARKSVIEW

```
SQL> CREATE VIEW MARKSVIEW AS SELECT NAME,SUBJECT,MARKS,GRADE FROM MMARKS;

View created.

SQL> DESC MARKSVIEW;
 Name                                  Null?    Type
 ------------------------------------  -------- --------------------------------
 NAME                                  NOT NULL VARCHAR2(40)
 SUBJECT                               NOT NULL VARCHAR2(20)
 MARKS                                 NOT NULL NUMBER(12)
 GRADE                                 NOT NULL CHAR(5)

SQL> SELECT * FROM MARKSVIEW;

NAME                                  SUBJECT                    MARKS GRADE
------------------------------------  --------------------       ---------- -----
CHITRA                                MATH                          98 A
JAGGU                                 SCIENCE                       54 E
MEERA                                 PHYSICS                       85 B
GOUTHAM                               CHEMISTRY                     79 C
NAINA                                 SOCIAL                        65 D
SIDDU                                 ENGLISH                       59 E

6 rows selected.
```

3)INSERT INTO MARKSVIEW

```
SQL> INSERT INTO MARKSVIEW VALUES('NOAH','BIOLOGY','56','E');

1 row created.

SQL> SELECT * FROM MMARKS;

NAME                                     SUBJECT                   MARKS GRADE
---------------------------------------- -------------------- ---------- -----
NOAH                                     BIOLOGY                      56 E
CHITRA                                   MATH                         98 A
JAGGU                                    SCIENCE                      54 E
MEERA                                    PHYSICS                      85 B
GOUTHAM                                  CHEMISTRY                    79 C
NAINA                                    SOCIAL                       65 D
SIDDU                                    ENGLISH                      59 E

7 rows selected.
```

4)DELETE FROM MARKSVIEW

```
SQL> DELETE FROM MARKSVIEW WHERE GRADE='D';

1 row deleted.

SQL> SELECT * FROM MARKSVIEW;

NAME                                     SUBJECT                   MARKS GRADE
---------------------------------------- -------------------- ---------- -----
NOAH                                     BIOLOGY                      56 E
CHITRA                                   MATH                         98 A
JAGGU                                    SCIENCE                      54 E
MEERA                                    PHYSICS                      85 B
GOUTHAM                                  CHEMISTRY                    79 C
SIDDU                                    ENGLISH                      59 E

6 rows selected.
```

5)UPDATE MARKSVIEW

```
SQL> UPDATE MARKSVIEW SET
  2  NAME='HEERA' WHERE NAME='MEERA';

1 row updated.

SQL> SELECT * FROM MARKSVIEW;

NAME                                     SUBJECT                    MARKS GRADE
---------------------------------------- -------------------- ---------- -----
NOAH                                     BIOLOGY                       56 E
CHITRA                                   MATH                          98 A
JAGGU                                    SCIENCE                       54 E
HEERA                                    PHYSICS                       85 B
GOUTHAM                                  CHEMISTRY                     79 C
SIDDU                                    ENGLISH                       59 E

6 rows selected.
```

6)DROP VIEW

```
SQL> DROP VIEW MARKSVIEW;

View dropped.
```

7)CREATE NAME VIEW

```
SQL> CREATE VIEW NAME AS SELECT NAME FROM MMARKS;

View created.

SQL> SELECT * FROM NAME;

NAME
-------------------------------------------
NOAH
CHITRA
JAGGU
HEERA
GOUTHAM
SIDDU
```

8)

```
SQL> CREATE VIEW GRADE_E AS SELECT * FROM MMARKS WHERE GRADE='E';

View created.

SQL> SELECT * FROM GRADE_E;

NAME                                 SUBJECT                  MARKS GRADE
------------------------------------ ------------------------ ----------- -----
NOAH                                 BIOLOGY                      56 E
JAGGU                                SCIENCE                      54 E
SIDDU                                ENGLISH                      59 E
```

9)

```
SQL> CREATE VIEW MMARKSVIEW(STU_NAME,STU_SUBJECT,STU_MARKS,STU_GRADE) AS SELECT NAME,SUBJECT,MARKS,GRADE FROM MMARKS;

View created.

SQL> SELECT * FROM MMARKSVIEW;

STU_NAME                             STU_SUBJECT              STU_MARKS STU_G
------------------------------------ ------------------------ --------- -----
NOAH                                 BIOLOGY                      56 E
CHITRA                               MATH                         98 A
JAGGU                                SCIENCE                      54 E
HEERA                                PHYSICS                      85 B
GOUTHAM                              CHEMISTRY                    70 C
SIDDU                                ENGLISH                      59 E

6 rows selected.
```

10)

```
SQL> CREATE VIEW MARKS_VIEW1 AS SELECT NAME "STU_NAME",SUBJECT "STU_SUBJECT",MARKS "STU_MARKS",GRADE "STU_GRADE" FROM MMARKS;

View created.

SQL> SELECT * FROM MARKS_VIEW1;

STU_NAME                             STU_SUBJECT          STU_MARKS STU_G
------------------------------------ -------------------- --------- -----
NOAH                                 BIOLOGY                     56 E
CHITRA                               MATH                        98 A
JAGGU                                SCIENCE                     54 E
HEERA                                PHYSICS                     85 B
GOUTHAM                              CHEMISTRY                   79 C
SIDDU                                ENGLISH                     59 E

6 rows selected.
```

11)

```
SQL> CREATE VIEW MARKSVIEW1 AS SELECT MMARKS.NAME "STU_NAME",
  2  MMARKS.SUBJECT "STU_SUBJECT",
  3  MMARKS.MARKS "STU_MARKS",
  4  MMARKS.GRADE "STU_GRADE"
  5  FROM MMARKS;

View created.

SQL> SELECT * FROM MARKSVIEW1;

STU_NAME                                  STU_SUBJECT          STU_MARKS STU_G
----------------------------------------- -------------------- --------- -----
NOAH                                      BIOLOGY                     56 E
CHITRA                                    MATH                        98 A
JAGGU                                     SCIENCE                     54 E
HEERA                                     PHYSICS                     85 B
GOUTHAM                                   CHEMISTRY                   79 C
SIDDU                                     ENGLISH                     59 E

6 rows selected.
```

RESULT: Set operators and views in SQL are successfully implemented and executed

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