EXP 8

SET OPERATORS

<u>AIM</u>: 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;
                                           Null?
                                                    VARCHAR2(20)
ENAME
                                                    NUMBER(2)
DEPTID
SQL> desc Department402;
                                           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

NAME	SUBJECT MARKS	GRADE
CHITRA	MATH 98	A
JAGGU	SCIENCE 54	E
MEERA	PHYSICS 85	В
GOUTHAM	CHEMISTRY 79	c
NAINA	SOCIAL 65	D
SIDOU	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;
                                              Null? Type
                                  NOT NULL VARCHAR2(40)
NOT NULL VARCHAR2(20)
NOT NULL NUMBER(12)
SUBJECT
MARKS
                                               NOT NULL CHAR(5)
SQL> SELECT * FROM MARKSVIEW;
                                            SUBJECT MARKS GRADE
NAME
                                           MATH 98 A
SCIENCE 54 E
PHYSICS 85 B
CHEMISTRY 79 C
SOCIAL 65 D
EMGLISH 59 E
CHITRA
JAGGU
MEERA
GOUTHAM
NAINA
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 CHITRA JAGGU MEERA GOUTHAM NAINA	BIOLOGY MATH SCIENCE PHYSICS CHEMISTRY SOCIAL	56 E 98 A 54 E 85 B 79 C 65 D
7 rows selected.	ENGLISH	59 E

4)DELETE FROM MARKSVIEW

SQL> DELETE FROM MARKSVIEW WHERE GRADE='D';						
1 row deleted.						
SQL> SELECT * FROM MARKSVIEW;						
NAME	SUBJECT	MARKS	GRADE			
NOAH CHITRA JAGGU MEERA GOUTHAM SIDDU	BIOLOGY MATH SCIENCE PHYSICS CHEMISTRY ENGLISH	56 98 54 85 79	A E B C			
6 rows selected.	ENGLISH	39				

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 CHITRA JAGGU HEERA GOUTHAM SIDDU 6 rows selected.	BIOLOGY MATH SCIENCE PHYSICS CHEMISTRY ENGLISH	56 98 54 85 79 59	A E B C

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
                                                                      56 E
NOAH
                                         BIOLOGY
JAGGU
                                         SCIENCE
                                                                      54 E
SIDDU
                                         ENGLISH
                                                                      59 E
```

9)

```
SQL> CREATE VIEW MMARKSVIEW(STU_MAME,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
                                                                           56 E
NOAH
                                             BIOLOGY
                                                                            98 A
54 E
85 B
                                             MATH
SCIENCE
CHITRA
DAGGU
HEERA
GOUTHAM
SIDOU
                                             CHEMISTRY
ENGLISH
6 rows selected.
```

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

View created.

SQL> SELECT * FROM MARKS_VIEWI;

STU_NAME STU_SUBJECT STU_MARKS STU_G

NOAH BIOLOGY 56 E
CHITRA MATH 98 A
AAGGU SCIENCE 54 E
HEERA PHYSICS 85 B
GOUTHAM CHEMISTRY 79 C
SIDOU ENGLISH 59 E
```

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_SUBJECT STU_MARKS STU_G
STU_NAME
NOAH
                                               BIOLOGY
                                                                               56 E
CHITRA
                                                                                98 A
                                               MATH
JAGGU
                                              SCIENCE
                                                                                54 E
                                                                                85 B
HEERA
                                              PHYSICS
GOUTHAM
                                               CHEMISTRY
                                                                                79 C
SIDDU
                                               ENGLISH
                                                                                 59 E
6 rows selected.
```

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

CHITRALEKHA.CH RA1911003010387