Exp.No:4 *CREATION AND UPDATION OF VIEWS*

AIM:

To execute commands in creation and updating of views.

VIEW:

In SQL, a view is a virtual table based on the result-set of an SQL statement.

A view contains rows and columns, just like a real table. The fields in a view are fields from one or more real tables in the database.

You can add SQL functions, WHERE, and JOIN statements to a view and present the data as if the data were coming from one single table.

A view always shows up-to-date data

QUERIES:

1. **Create view**

```
SQL> select *  from vehicles;

        ID MODEL         MANUFACTURE COLOR          MILEAGE      REG_NO
---------- ----------    ----------- ----------  ----------  ----------
         1 suzuki             2000 white               45          99
         3 maruthi            2012 blue                70          97
         2 toyoto             2008 black               30          94
         5 benz               2004 black               50          98
         4 hondo              2020 red                 60          90
```

SYNTAX:

CREATE OR REPLACE VIEW view_name AS SELECT column1, column2, ... FROM table_name WHERE condition;

```
SQL> create or replace view vehi as select model,color,id from vehicles where
id>1;

View created.

SQL> select * from vehi;

MODEL      COLOR              ID
---------- ----------  ----------
maruthi    blue                3
toyoto     black               2
benz       black               5
hondo      red                 4
```

2. Insert in view

Insert into view_name(column1,..column n) values(values);

```
SQL> insert into vehi values('supra','grey',6,96);

1 row created.

SQL> select * from vehicles;

       ID MODEL       MANUFACTURE COLOR          MILEAGE      REG_NO
---------- ----------- ----------- ----------- ----------- -----------
        1 suzuki             2000 white             45          99
        3 maruthi            2012 blue              70          97
        2 toyoto             2008 black             30          94
        5 benz               2004 black             50          98
        4 hondo              2020 red               60          90
        9 acer                    brown                         11
        6 supra                   grey                          96
```

3. Delete in view:

Delete from view_name where conditions;

```
SQL> delete from vehi where model='supra';

1 row deleted.
```

4. Update view

Update view_name set attribute=value where conditions;

```
SQL> update vehi set color='yellow' where reg_no=97;

1 row updated.
```

5. Drop view
Drop view view_name;

```
SQL> drop view r_vehi;

View dropped.
```

6. **Order by command**
   Select * from view_name order by column_name;

```
SQL> select * from vehi order by id;

MODEL       COLOR              ID     REG_NO
---------- ---------- ---------- ----------
toyoto      black               2         94
maruthi     yellow              3         97
hondo       red                 4         90
benz        black               5         98
acer        brown               9         11
```

   7.With read only constraint

   create view part_view as select *from table_name with read only constraint rea
   dcons;

```
SQL> create view r_vehi as select * from vehicles with read only constraint re
adcons;

View created.
```

7. **Execute DML commands in view table and check whether it is reflected in main
   table.** SQL> insert into particulars_view(sys_no, gametype)values('08', 'Racing');

```
SQL> insert into vehi values('acer','brown',9,11);

1 row created.

SQL> select * from vehicles;

        ID MODEL      MANUFACTURE COLOR          MILEAGE     REG_NO
---------- ---------- ----------- ---------- ---------- ----------
         1 suzuki           2000 white              45         99
         3 maruthi          2012 blue               70         97
         2 toyoto           2008 black              30         94
         5 benz             2004 black              50         98
         4 hondo            2020 red                60         90
         9 acer                  brown                          11

6 rows selected.
```

   IT IS REFELECTED.

8.Execute DML commands in main table and check whether it is reflected in view table.

SQL> insert into particulars(sys_no, gametype, amount)values('12', 'Racing','30');

```
SQL> insert into vehicles values(8,'mahi',2004,'sandal',80,23);

1 row created.

SQL> select * from vehi;

MODEL       COLOR          ID      REG_NO
---------- ---------- ---------- ----------
maruthi    yellow          3          97
toyoto     black           2          94
benz       black           5          98
hondo      red             4          90
acer       brown           9          11
mahi       sandal          8          23

6 rows selected.
```

IT IS REFLECTED.

  **9. Do DML operations in view table with read only constraint and tell what
     happens.**

SQL> insert into part_view(sys_no, gametype, amount)values('10', 'Cooking games', '25');

insert into part_view(sys_no, gametype, amount)values('10', 'Cooking games', '25')

ERROR at line 1:ORA-42399: **cannot perform a DML operation on a read-only view**

```
SQL> insert into r_vehi values(11,'classo',2017,'violet',99,41);
insert into r_vehi values(11,'classo',2017,'violet',99,41)
*
ERROR at line 1:
ORA-42399: cannot perform a DML operation on a read-only view
```

RESULT:

        Thus the commands on creation and updation of views were executed and verified
successfully.