PRACTICAL 8

Study of various types of views Considering Emp and Dept table, perform the following:

1. Create a view named emp_hor with the job titled as ‘ANALYST’.

```
SQL> create view emp_hor
  2  as
  3  select * from emp1
  4  where job='ANALYST';

View created.
```

```
SQL> select * from emp_hor;

    EMP_NO ENAME      JOB              MGR HIREDATE         SAL       COMM    DEPT_NO
---------- ---------- --------- ---------- --------- ---------- ---------- ----------
      7788 SCOTT      ANALYST         7566 19-APR-87       3000                    20
      7902 FORD       ANALYST         7566 03-DEC-81       3000                    20
```

2. Create a view named vwemp specifying name of employees, job and their salary.

```
SQL> create view vwemp(Ename,Job,SAL)
  2  as
  3  select Ename,Job,SAL from emp1
  4  ;

View created.

SQL> select * from vwemp;

ENAME      JOB              SAL
---------- --------- ----------
KING       PRESIDENT       5000
BLAKE      MANAGER         2850
CLARK      MANAGER         2450
JONES      MANAGER         2975
SCOTT      ANALYST         3000
FORD       ANALYST         3000
SMITH      CLERK            800
ALLEN      SALESMAN        1600
WARD       SALESMAN        1250
MARTIN     SALESMAN        1250
TURNER     SALESMAN        1500
ADAMS      CLERK           1100
JAMES      CLERK            950
MILLER     CLERK           1300

14 rows selected.
```

3. Create a view displaying total salary on the basis of the jobs.

```
SQL> create view TSAL(TOT_SAL,Job)
  2  as
  3  select sum(SAL),Job from emp1
  4  group by Job;

View created.

SQL> select * from TSAL;

   TOT_SAL JOB
---------- ---------
      4150 CLERK
      5600 SALESMAN
      5000 PRESIDENT
      8275 MANAGER
      6000 ANALYST
```

4. Create a view which contains name of employee, dept and the location of the employees.

```
SQL> create view new2
  2  as
  3  select Ename,Dept_no,Job from emp1;

View created.

SQL> select * from new2;

ENAME         DEPT_NO JOB
---------- ---------- ---------
KING               10 PRESIDENT
BLAKE              30 MANAGER
CLARK              10 MANAGER
JONES              20 MANAGER
SCOTT              20 ANALYST
FORD               20 ANALYST
SMITH              20 CLERK
ALLEN              30 SALESMAN
WARD               30 SALESMAN
MARTIN             30 SALESMAN
TURNER             30 SALESMAN

ENAME         DEPT_NO JOB
---------- ---------- ---------
ADAMS              20 CLERK
JAMES              30 CLERK
MILLER             10 CLERK

14 rows selected.
```

5. Create a view to display the name of the employees with their salary and job who belongs to department 20.

```
SQL> create view new3
  2  as
  3  select SAL,Job from emp1
  4  where Dept_no=20;

View created.

SQL> select * from new3;

       SAL JOB
---------- ---------
      2975 MANAGER
      3000 ANALYST
      3000 ANALYST
       800 CLERK
      1100 CLERK
```

6. Delete all the views created above.

```
SQL> drop view emp_hor;

View dropped.

SQL> drop view vwemp;

View dropped.

SQL> drop view TSAL;

View dropped.

SQL> drop view new3;

View dropped.
```

PRACTICAL 9

Study of subqueries with all its clauses

1. Display the employee name whose salary is greater than the salary of employee 7566.

```
SQL> select Ename
  2  from panthiv_EMP
  3  where SAL>(select SAL from panthiv_EMP where Emp_no=7566);

ENAME
----------
KING
SCOTT
FORD
```

2. Display the employee name, sal, job of the employee whose job is similar to the employee 7369.

```
SQL> select Ename,SAL,Job
  2  from panthiv_EMP
  3  where Job=(select Job from panthiv_EMP where Emp_no=7369);

ENAME             SAL JOB
---------- ---------- ---------
SMITH              800 CLERK
ADAMS             1100 CLERK
JAMES              950 CLERK
MILLER            1300 CLERK
```

3. Display the employee name with the salary less than any salary of job type CLERK.

```
SQL> select Ename,SAL,Job
  2  from panthiv_EMP
  3  where SAL<any(select SAL from panthiv_EMP where Job='CLERK');

ENAME             SAL JOB
---------- ---------- ---------
SMITH              800 CLERK
JAMES              950 CLERK
ADAMS             1100 CLERK
MARTIN            1250 SALESMAN
WARD              1250 SALESMAN
```

4. Display the employee name, salary, department id, job id for those employees who work in the same designation as the employee whose id is 7900.

```
SQL> select Ename,SAL,Dept_no from emp1
  2  where Job=(select Job from emp1 where Emp_no=7900);

ENAME             SAL    DEPT_NO
---------- ---------- ----------
SMITH             800         20
ADAMS            1100         20
JAMES             950         30
MILLER           1300         10
```

5. Display the detail of the department whose manager Ecode='7698'.

```
SQL> select Ename,SAL,Dept_no,Job from panthiv_EMP
  2  where Job=(select Job from panthiv_EMP where Emp_no=7698);

ENAME              SAL    DEPT_NO JOB
---------- ---------- ---------- ---------
BLAKE             2850         30 MANAGER
CLARK             2450         10 MANAGER
JONES             2975         20 MANAGER
```

6. Display the employees whose salary is greater than any MANAGER.

```
SQL> select Ename,SAL
  2  from emp1
  3  where SAL>any(select SAL from emp1 where Job='MANAGER');

ENAME              SAL
---------- ----------
KING              5000
SCOTT             3000
FORD              3000
JONES             2975
BLAKE             2850
```

PRACTICAL 10

Study of Transaction (Commit/ Rollback), Locks

1. Perform Commit and Rollback on a table.

```
SQL> create table x(rno int);

Table created.

SQL> insert into x values(1);

1 row created.

SQL> insert into x values(2);

1 row created.

SQL> commit;

Commit complete.

SQL> select * from x;

       RNO
----------
         1
         2

SQL> delete from x where rno=2;

1 row deleted.

SQL> select * from x;

       RNO
----------
         1

SQL> rollback;

Rollback complete.

SQL> select * from x;

       RNO
----------
         1
         2
```

2. Implementation of Share and Exclusive Lock Mode in employee table.
Share mode:

```
SQL> lock table panthiv_EMP in share mode;

Table(s) Locked.
```

Run SQL Command Line

```
SQL*Plus: Release 10.2.0.1.0 - Production on Thu Apr 8 21:55:03 2021

Copyright (c) 1982, 2005, Oracle.  All rights reserved.

SQL> connect
Enter user-name: system
Enter password:
Connected.
SQL> lock table panthiv_EMP in share mode;

Table(s) Locked.

SQL>
```

Exclusive mode:

```
SQL> lock table panthiv_EMP in exclusive mode;

Table(s) Locked.
```

Run SQL Command Line

```
SQL*Plus: Release 10.2.0.1.0 - Production on Thu Apr 8 21:57:38 202

Copyright (c) 1982, 2005, Oracle.  All rights reserved.

SQL> connect
Enter user-name: system
Enter password:
Connected.
SQL> lock table panthiv_EMP in exclusive mode;
```