

Title of the Exercise : VIEWS

Date of the Exercise :

OBJECTIVE (AIM) OF THE EXPERIMENT

To create and manipulate various database objects of the Table using views

PROCEDURE

a) Procedure for doing the experiment:

| Step no. | Details of the step |
|----------|--|
| 1 | Views: A view is the tailored presentation of data contained in one or more table and can also be said as restricted view to the data"s in the tables. A view is a "virtual table" or a "stored query" which takes the output of a query and treats it as a table. The table upon which a view is created is called as base table. |
| 2 | A view is a logical table based on a table or another view. A view contains no data of its own but is like a window through which data from tables can be viewed or changed. The tables on which a view is based are called base tables. The view is stored as a SELECT statement in the data dictionary |
| 3 | Advantages of a view: a. Additional level of table security. b. Hides data complexity. c. Simplifies the usage by combining multiple tables into a single table. d. Provides data"s in different perspective. |
| 4 | Types of view: Horizontal -> enforced by where clause Vertical -> enforced by selecting the required columns |

a) SQL Commands

Creating and dropping view:

Syntax:

Create [or replace] view <view name> [column alias names] as <query> [with
<options> conditions]; Drop view <view name>;

Example:

Create or replace view empview as select * from emp; Drop view empview;

b) Queries: Tables used:

SQL> select * from emp;

EMPNO ENAMEJOB DEPTNO SAL

| EMPNO | ENAME | JOB | DEPTNO | SAL |
|-------|---------|-----|--------|-------|
| 1 | Mathi | | AP | 10000 |
| 2 | Arjun | | ASP | 12000 |
| 3 | Gugan | | ASP | 20000 |
| 4 | Karthik | | AP | 15000 |

Consider the following tables:

EMPLOYEE(Emp_id, EMP_name,Job_name,Manager_id,Hire_date,Salary,Deptno)

DEPARTMENT(Deptno, Dname, MGRSSN)

PROJECT(Pname,Pno,Plocation,Deptno)

emp_id | emp_name | job_name | manager_id | hire_date | salary | E_Bonus | dep_no

| | | | | | | | |
|-------|---------|-----------|-------|------------|---------|--------|------|
| 68319 | KAYLING | PRESIDENT | | 1991-11-18 | 6000.00 | 300.00 | 1001 |
| 66928 | BLAZE | MANAGER | 68319 | 1991-05-01 | 2750.00 | 200.00 | 3001 |
| 67832 | CLARE | MANAGER | 68319 | 1991-06-09 | 2550.00 | 200.00 | 1001 |

65646 | JONAS | MANAGER | 68319 | 1991-04-02 | 2957.00 | 200.00 2001

67858 | SCARLET | ANALYST | 65646 | 1997-04-19 | 3100.00 | 250.00 2001

69062 | FRANK | ANALYST | 65646 | 1991-12-03 | 3100.00 | 250.00 2001

63679 | SANDRINE | CLERK | 69062 | 1990-12-18 | 900.00 | 150.00 2001

64989 | ADELYN | SALESMAN | 66928 | 1991-02-20 | 1700.00 | 180.00 3001

65271 | WADE | SALESMAN | 66928 | 1991-02-22 | 1350.00 | 180.00 3001

66564 | MADDEN | SALESMAN | 66928 | 1991-09-28 | 1350.00 | 180.00 3001

Project Table

68454 | TUCKER | SALESMAN | 66928 |
1991-09-08 | 1600.00 | 180.00 3001

68736 | ADNRES | CLERK | 67858 |
1997-05-23 | 1200.00 | 150.00 2001

69000 | JULIUS | CLERK | 66928 |
1991-12-03 | 1050.00 | 150.00 3001

69324 | MARKER | CLERK | 67832 |
1992-01-23 | 1400.00 | 150.00 1001

| Pno | Pname | PCitylocation | PCountry |
|-----|-------|---------------|------------------------------|
| 111 | P_1 | New York | United States of America, |
| 112 | P_2 | Dallas | United States |
| 113 | P_3 | Chicago | United States of America |
| 114 | P_4 | Denmark | northern Europe |
| 115 | P_5 | Paris | France |
| 116 | P_6 | Chicago | United States of America |

Department Table

| deptno | dname | Citylocation | dCountry |
|--------|------------|--------------|------------------------------|
| 1001 | Accounting | New York | United States of America, |
| 2001 | Research | Dallas | United States |
| 3001 | Sales | Chicago | United States of America |
| 4001 | Marketing | Los Angeles | United States |

Write a query for the following:-

Practical-10

Q1. Display the details of employees containing **emp_id**, **emp_name**, **job_name**, **manager_id**, **hire_date**, **salary** and include only those employees who work as salesman.

Q2. Create a separate table for department having country as United states.

```
mysql> SELECT emp_id, emp_name, job_name, manager_id, hire_date, salary
-> FROM employees_160
-> WHERE job_name = 'SALESMAN';
+-----+-----+-----+-----+-----+-----+
| emp_id | emp_name | job_name | manager_id | hire_date | salary |
+-----+-----+-----+-----+-----+-----+
| 64989 | ADELYN   | SALESMAN | 66928      | 1991-02-20 | 1700.00 |
| 65271 | WADE     | SALESMAN | 66928      | 1991-02-22 | 1350.00 |
| 66564 | MADDEN   | SALESMAN | 66928      | 1991-09-28 | 1350.00 |
| 68454 | TUCKER   | SALESMAN | 66928      | 1991-09-08 | 1600.00 |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> -- Create a new table for U.S. departments_160
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> CREATE TABLE USDepartments_160 AS
-> SELECT *
-> FROM departments_160
-> WHERE dCountry = 'United States' OR dCountry = 'United States of America';
Query OK, 4 rows affected (0.04 sec)
Records: 4  Duplicates: 0  Warnings: 0
```

```
mysql>
mysql> -- Display the contents of the new table
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> SELECT * FROM USDepartments_160;
+-----+-----+-----+-----+
| deptno | dname      | CityLocation | dCountry |
+-----+-----+-----+-----+
| 1001 | Accounting | New York     | United States of America |
| 2001 | Research   | Dallas       | United States |
| 3001 | Sales      | Chicago      | United States of America |
| 4001 | Marketing  | Los Angeles  | United States |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

Q4. The project details are required for some purpose. Provide the data about the project location.

Q5. Drop the views on departments.

```
mysql> SELECT Pno, Pname, PCityLocation, PCountry
-> FROM projects_160;
ERROR 1146 (42S02): Table 'dbms_ycce.projects_160' doesn't exist
mysql> SELECT Pno, Pname, PCityLocation, PCountry
-> FROM project_160;
```

| Pno | Pname | PCityLocation | PCountry |
|-----|-------|---------------|--------------------------|
| 111 | P_1 | New York | United States of America |
| 112 | P_2 | Dallas | United States |
| 113 | P_3 | Chicago | United States of America |
| 114 | P_4 | Denmark | Northern Europe |
| 115 | P_5 | Paris | France |
| 116 | P_6 | Chicago | United States of America |
| 117 | P_7 | Paris | NULL |

```
7 rows in set (0.00 sec)

mysql> DROP VIEW department_view;
ERROR 1051 (42S02): Unknown table 'dbms_ycce.department_view'
mysql> DROP VIEW departments;
ERROR 1347 (HY000): 'dbms_ycce.departments' is not VIEW
mysql> CREATE VIEW DepartmentView AS
-> SELECT *
-> FROM departments;
Query OK, 0 rows affected (0.02 sec)

mysql> DROP VIEW DepartmentView;
Query OK, 0 rows affected (0.02 sec)
```