EXPERIMENT-7

Aim: To Practice View Command.

Software Used: MySQL

Theory:

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 present from one or more real tables in the database.

To demonstrate VIEW command, we use the following tables:

EMPLOYEE TABLE:

```
CREATE TABLE EMP(EID INT NOT NULL PRIMARY KEY, FIRSTNAME VARCHAR(255) NOT
NULL,LASTNAME VARCHAR(255),SALARY INT);
```

Figure: Employee Table

```
CREATE TABLE DEPT(DEPT_ID INT NOT NULL PRIMARY KEY,DEPT_NAME VARCHAR(255) NOT
NULL,EID INT)
```

Figure: Department Table

```
INSERT INTO EMP(EID,FIRSTNAME,LASTNAME,SALARY)
VALUES(1,"TUSHAR","BHATIA",100000),(2,"ASHISH","GUPTA",200000),
(3,"DHRUV","VARSHNEY",300000),(4,"SID","JO",400000),(5,"SHREYAS","OM",500000)
```

Figure: Query to insert values into Employee Table

EID	FIRSTNAME	LASTNAME	SALARY
1	TUSHAR	BHATIA	100000
2	ASHISH	GUPTA	200000
3	DHRUV	VARSHNEY	300000
4	SID	JO	400000
5	SHREYAS	OM	500000

Figure: Result Table

DEPARTMENT TABLE:

```
INSERT INTO DEPT(DEPT_ID,DEPT_NAME,EID) VALUES(10,"HR",1),(20,"Finance",2),
(30,"Accounts",3),(40,"Physics",4),(50,"Software",5)
```

Figure: Insert into Department Table

DEPT_ID	DEPT_NAME	EID
10	HR	1
20	Finance	2
30	Accounts	3
40	Physics	4
50	Software	5

Figure: Result Table

CREATING VIEW:

From a Single Table:

```
CREATE VIEW details AS
SELECT EID, FIRSTNAME
FROM emp
WHERE Salary >= '200000';
```

Figure: Creating View Table

EID	FIRSTNAME
2	ASHISH
3	DHRUV
4	SID
5	SHREYAS

Figure: Result table

From Multiple Tables:

```sql
CREATE VIEW details2 AS
SELECT emp.FIRSTNAME, emp.SALARY, Dept.DEPT_NAME
FROM emp, dept
WHERE emp.EID = dept.EID;
```

Figure: Creating View Table

FIRSTNAME	SALARY	DEPT_NAME
TUSHAR	100000	HR
ASHISH	200000	Finance
DHRUV	300000	Accounts
SID	400000	Physics
SHREYAS	500000	Software

Figure: Result table

Updating a View:

```sql
CREATE OR REPLACE VIEW details AS
SELECT emp.FIRSTNAME, emp.Salary, dept.DEPT_NAME, dept.DEPT_ID
FROM emp, dept
WHERE emp.EID = dept.EID;
```

Figure: Updating View Table

Figure: Result table

Deleting a View:

```
DROP VIEW details2;
```

Figure: Drop View Table

Figure: Result Query

Conclusion: Various forms of view were performed and demonstrated.