Practical 6

Title : Create views for table.

Aim : Demonstration of MySQL VIEW. to create view on table (single or multiple table)

Theory : VIEW

A SQL view is a virtual table based on the result of a SELECT statement. It provides an alternative way to access data from one or more tables, with a specific query structure & can simplify complex data retrival & join operations.

The data in a view is not stored physically like a regular table, but the view acts as a window to the underlying data. The data can be updated by modifying the data in the underlying tables, & changes made to the view will reflect in the original tables.

Syntax

```
CREATE OR REPLACE VIEW viewName AS
SELECT column1, column2,....
FROM tableName
[WHERE condition];
```

- CREATE OR REPLACE

This specifies the action to be performed. If a view with the same name already exists, the existing view will be replaced with the

new defination. If no view with the same name exists, a new view will be created.

- VIEW viewName

This defines the name of the view to be created or replaced. viewName is the name of view.

- AS

This keyword separates the view name from the defination.

- SELECT column1, column2,...

This is the query that defines the data to be included in the view.

- FROM tableName

This specifies the table from which the data is being selected.

- WHERE condition

This is an optional clause that defines the criteria for selecting the data to be included in the view.

ALTER VIEW

This statement is used to modify the an existing view.

Syntax

```
ALTER VIEW viewName AS
SELECT column1, column2,...
FROM tableName
[WHERE condition];
```

VIEW on VIEW

A view on a view in SQL refers to a view that is based on another view rather than table.

DROP VIEW

This statement is used to delete / drop existing view.

Syntax

```
DROP VIEW viewName;
```

UPDATE record in VIEW

It is only valid for single table view.

Syntax

```
UPDATE tableName SET
columnName = value,---,
WHERE {condition};
```

Examples: 1] Create view on table tb1Employee which has empId, empName, empSalary attributes, view based on empSalary >= 12000 & second view based or depend on empId <= 3

2] Create view on two table, which is tb2Employee & tb3Employee has ~~sam~~ empId, empName, empAddress, empDepartment attributes for both columns.

Conclusion: In conclusion, SQL views are virtual tables that presents a simplified view of the data based on a SELECT statement. Views are read-only & can't be updated directly, changes to data must be made to underlying tables. views can simplify data access, enhance security & abstraction & simplify complex queries.