MySQL - Drop View

A MySQL View is a virtual table which is generated from a predefined SQL query. It contains (all or selective) records from one or more database tables.

Views are not stored in a database physically, but they can still be dropped whenever not necessary. Even though they are used to see and modify the data in a database table, the data in that table remains unchanged when views are dropped.

The MySQL DROP VIEW Statement

The **DROP VIEW** statement in MySQL is used to delete an existing view, along with its definition and other information. Once the view is dropped, all the permissions for it will also be removed. We can also use this statement to drop indexed views.

Suppose a table is dropped using the DROP TABLE command and it has a view associated to it, this view must also be dropped explicitly using the DROP VIEW command.

NOTE –

- While trying to perform queries, the database engine checks all the objects referenced in that statement are valid and exist. So, if a view does not exist in the database, the DROP VIEW statement will throw an error.
- To drop a table in a database, one must require ALTER permission on the said table and CONTROL permissions on the table schema.

```
DROP VIEW view_name;
```

```
CREATE TABLE CUSTOMERS (
   ID INT NOT NULL,
   NAME VARCHAR(15) NOT NULL,
   AGE INT NOT NULL,
   ADDRESS VARCHAR(25),
   SALARY DECIMAL(10, 2),
   PRIMARY KEY(ID)
);
```

```
INSERT INTO CUSTOMERS VALUES
(1, 'Ramesh', '32', 'Ahmedabad', 2000),
(2, 'Khilan', '25', 'Delhi', 1500),
(3, 'Kaushik', '23', 'Kota', 2500),
(4, 'Chaitali', '26', 'Mumbai', 6500),
(5, 'Hardik','27', 'Bhopal', 8500),
(6, 'Komal', '22', 'MP', 9000),
(7, 'Muffy', '24', 'Indore', 5500);
```

Creating a View –

```
CREATE VIEW testView AS SELECT * FROM CUSTOMERS;
```

You can verify the list of all the views using the following query –

```
SHOW FULL TABLES WHERE table_type = 'VIEW';
```

Dropping a View –

Following query drops the view created above –

```
DROP VIEW testView;
```

```
SHOW FULL TABLES WHERE table_type = 'VIEW';
```

The IF EXISTS clause

If you try to drop a view that doesn't exist, an error will be generated. Let us see an example where we are dropping a view named NEW using the following query –

```
DROP VIEW NEW;
```

The following error is displayed (where 'tutorialspoint' is the database name) −

ERROR 1051 (42S02): Unknown table 'tutorialspoint.new'

However, if you use the **IF EXISTS** clause along with the DROP VIEW statement as shown below, the query will be ignored even if a VIEW with the given name does not exist.

```
DROP VIEW IF EXISTS NEW;
```

Deleting Rows from a View

Instead of removing an entire view, we can also drop selected rows of a view using the DELETE statement with a WHERE clause.

Syntax

Following is the syntax of the DELETE statement –

```
DELETE FROM view_name WHERE condition;
```

Example

In this example, let us first create a testView on the CUSTOMERS table using the following query –

```
CREATE VIEW testView AS SELECT * FROM CUSTOMERS;
```

Now, using the following query, you can delete a record from the testView created on the CUSTOMERS table. The changes made to the data in view will finally be reflected in the base table CUSTOMERS.

```
DELETE FROM testView WHERE Location = 'Indore';
```

The associated table CUSTOMERS will have the following records −

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	Kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	Hyderabad	4500.00

Dropping View Using Client Program

In addition to drop a view from the MySQL database using the MySQL query, we can also perform the another operation on a table using a client program.

Syntax

Following are the syntaxes of the Drop View from MySQL in various programming languages –

```
drop_view_query = "DROP VIEW view_name"
cursorObj.execute(drop_view_query);
```

```
Python Program
import mysql.connector
#establishing the connection
connection = mysql.connector.connect(
   host='localhost',
   user='root',
   password='password',
   database='tut'
)
cursorObj = connection.cursor()
drop_view_query = "DROP VIEW tutorial_view"
cursorObj.execute(drop_view_query)
connection.commit()
print("View dropped successfully.")
cursorObj.close()
connection.close()
```