

1. What is the difference between View and Table.
2. What is view? State the types of View.
3. What is the difference between Simple View and Complex View.

| Table | View |
|--|---|
| A database object that stores data physically in rows and columns. | A virtual table created based on the result of a SQL query. |
| Stores data physically in the database. | Does not store data; it only stores the SQL query. |
| Data can be modified directly insert, update, delete. | Depends on the view type; some views may allow data modification. |

VIEW:

A View is a virtual table in a database that is the result of a stored SQL query. It is used to simplify complex queries, enhance security by limiting data access, and provide a simplified interface for users. Views are dynamically updated whenever the underlying data in the base tables changes.

Types of Views:

1. **Simple View:**
 - Based on a single table.
 - Does not include joins or aggregate functions.
 - Allows DML operations (INSERT, UPDATE, DELETE).
2. **Complex View:**
 - Based on multiple tables or contains joins, aggregate functions, or subqueries.
 - May not always allow DML operations depending on its structure.

| Simple view | Complex view |
|--------------------------------|--------------------------------|
| Based on a single table | Based on multiple table |
| Does not include joins | Can include joins |
| Support INSERT, UPDATE, DELETE | May not support DML operations |
| faster | Slower |