**VIEWS:**

A **view** in SQL is a virtual table that represents the result of a query.

Unlike a regular table, a view does not store data on the disk but dynamically retrieves data from one or more tables whenever it is queried.

This allows for a customised representation of data without duplicating the actual data.

**Listing All Views**

You can list all views in a database using the SHOW FULL TABLES statement or querying the information\_schema table.

“SHOW FULL TABLES WHERE table\_type LIKE “%VIEW%”;”

Or using information\_schema:

SELECT table\_name

FROM informatio\_schema.views

WHERE table\_schema = ‘database\_name’;

**Uses of a View**

* **Restricting data access**: Views can limit access to specific rows and columns.
* **Hiding data complexity**: Views can simplify complex queries involving multiple tables.
* **Simplifying commands**: Users can select data from multiple tables without knowing how to perform joins.
* **Storing complex queries**: Views can store complex queries for reuse.
* **Renaming columns**: Views can rename columns without affecting the base tables.

**EVENT:**

* In SQL, events refer to scheduled tasks or jobs that are automatically executed by the database server at predefined intervals or specific points in time.
* These tasks are useful for automating database maintenance tasks, such as backups, data archiving, or any repetitive SQL operations.
* Events in SQL are a powerful feature for automating repetitive tasks, improving efficiency, and reducing manual intervention.

**Weather Application with Hashmap Repository:**

[**LalithaRavuri/weatherSpring (github.com)**](https://github.com/LalithaRavuri/weatherSpring)

In the weather app to store data for various cities we use hashmap.

But, we are using a single instance of weatherRecord class.

So whenever new data is given it overrides the old data.

To avoid this we have two ways:

1. Creating new instances in the service class by using new keyword.
2. Using Scope prototype.

Both ways are not as efficient because when the program is run in more than one server, the data will not be synchronised.

So we have to use a database to solve the issue.