**SQL View**

**1. What is a View in SQL, and How Is It Different from a Table?**

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| **Feature** | **Table** | **View** |
| **Storage** | Physically stores data | Does **not** store data (virtual) |
| **Data Source** | Original data source | Based on a SQL query |
| **Modification** | Can be directly modified | Usually read-only (some views are updatable) |
| **Usage** | Used to store raw or processed data | Used to **simplify** complex queries |
| **Persistence** | Stores data permanently | Reflects current data from source tables |

**2. Advantages of Using Views in SQL Databases**

1. **Simplifies Complex Queries**
   * You can hide complex JOINs or filters inside a view and select from it like a simple table.
2. **Enhances Security**
   * You can restrict access to specific columns or rows by creating a view, instead of giving access to the full table.
3. **Improves Readability and Reusability**
   * Once created, views can be reused in multiple queries, improving consistency and saving time.
4. **Provides Logical Data Independence**
   * If the underlying table structure changes, you can update the view without changing applications or queries using the view.
5. **Data Aggregation or Formatting**
   * You can create views that present data in summarized or formatted ways (e.g., totals, averages).
6. **Encapsulates Business Logic**
   * You can centralize certain business rules (like filtering out inactive records) in views to enforce consistency.