**SQL Trigger**

1. **What is a trigger in SQL? Describe its types and when they are used.**

A trigger is a special SQL object that automatically runs when a specific event (INSERT, UPDATE, or DELETE) happens on a table.

Types of Triggers:

1. BEFORE Trigger – Executes before the action (used for validation or modification).
2. AFTER Trigger – Executes after the action (used for logging or auditing).

Each type can be combined with:

* INSERT – When a new row is added
* UPDATE – When data in a row is changed
* DELETE – When a row is removed

**2. Difference Between INSERT, UPDATE, and DELETE**

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| **Trigger Type** | **When It Fires** | **Common Use Cases** |
| **INSERT** | When a new row is inserted | - Validate input- Auto-fill fields- Log new entries |
| **UPDATE** | When an existing row is changed | - Track changes- Audit old and new values |
| **DELETE** | When a row is removed | - Prevent deletion- Log deleted data- Archive rows |