**1. Difference between NULL and 0?**

* NULL: Represents **missing or unknown** data; it is **not a value**.
* 0: A **numeric value**, meaning zero.
* **Key Point**: NULL ≠ 0.

**2. What is a default constraint?**

* A **default constraint** assigns a **default value** to a column when no value is specified during insertion.

CREATE TABLE users (

id INT,

country VARCHAR(20) DEFAULT 'India'

);

**3. How does IS NULL work?**

* Used to check if a column **contains NULL**.

**4. How do you update multiple rows?**

* Use UPDATE with a WHERE clause that matches multiple rows.

**5. Can we insert partial values?**

* Yes, if other columns allow NULL or have a **default** value:

**6. What happens if a NOT NULL field is left empty?**

* It will cause an **error**. You must provide a value for NOT NULL fields.

**7. How do you rollback a deletion?**

* Use **transactions**:

BEGIN;

DELETE FROM employees WHERE id = 5;

ROLLBACK;

**8. Can we insert values into specific columns only?**

* Yes. Specify column names in the INSERT statement:

INSERT INTO students (name, age) VALUES ('Amit', 20);

**9. How to insert values using SELECT?**

* Use INSERT INTO ... SELECT ...:

INSERT INTO alumni (name, year)

SELECT name, graduation\_year FROM students WHERE passed = 1;

**10. What is ON DELETE CASCADE?**

* A **foreign key rule**: when a record in the parent table is deleted, the related rows in the child table are **automatically deleted**.

FOREIGN KEY (student\_id) REFERENCES students(id) ON DELETE CASCADE