

# SQL Project - Data Insertion and Handling NULLs

## Objective:

Practice inserting, updating, and deleting data. Learn to handle missing values using NULL or default.

## Step 1: INSERT INTO - Adding Data

```
-- Add a new member to the library
INSERT INTO Members (name, email, phone)
VALUES ('Amit Kumar', 'amit@gmail.com', '9123456780');
```

## Step 2: Handling NULLs

```
-- Insert a member with missing phone number
INSERT INTO Members (name, email, phone)
VALUES ('Riya Sen', 'riya@gmail.com', NULL);

-- Insert a book using default value (assuming default is set)
INSERT INTO Books (title, author_id, category_id, total_copies)
VALUES ('Wings of Fire', 1, 1, 10);
```

## Step 3: UPDATE with WHERE

```
-- Update phone number of a member
UPDATE Members
SET phone = '9876543210'
WHERE name = 'Riya Sen';
```

## Step 4: DELETE with WHERE

```
-- Delete a borrow record where return date is missing
DELETE FROM Borrow
WHERE return_date IS NULL;
```

## Outcome:

A clean and consistent database populated using INSERT, UPDATE, and DELETE commands, with missing data handled properly using NULL and DEFAULT.