

Inserting Data into MySQL Tables

To add data into a table, we use the `INSERT INTO` statement.

Insert Without Specifying Column Names (Full Row Insert)

This method **requires** you to provide values for **all columns in order**, except columns with default values or `AUTO_INCREMENT`.

```
INSERT INTO users VALUES  
(1, 'Alice', 'alice@example.com', 'Female', '1995-05-14', DEFAULT);
```

Not recommended if your table structure might change (e.g., new columns added later).

Insert by Specifying Column Names (Best Practice)

This method is safer and more readable. You only insert into specific columns.

```
INSERT INTO users (name, email, gender, date_of_birth) VALUES  
( 'Bob', 'bob@example.com', 'Male', '1990-11-23');
```

or for multiple rows:

```
INSERT INTO users (name, email, gender, date_of_birth) VALUES  
( 'Bob', 'bob@example.com', 'Male', '1990-11-23'),  
( 'Charlie', 'charlie@example.com', 'Other', '1988-02-17');
```

The remaining columns like `id` (which is `AUTO_INCREMENT`) and `created_at` (which has a default) are automatically handled by MySQL.

Insert Multiple Rows at Once

```
INSERT INTO users (name, email, gender, date_of_birth) VALUES
('Charlie', 'charlie@example.com', 'Other', '1988-02-17'),
('David', 'david@example.com', 'Male', '2000-08-09'),
('Eva', 'eva@example.com', 'Female', '1993-12-30');
```

This is more efficient than inserting rows one by one.
