

# Inserting Data into MySQL Tables

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

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## Insert Without Specifying Column Names (Full Row Insert)

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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).

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## Insert by Specifying Column Names (Best Practice)

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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.

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## 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');
```

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This is more efficient than inserting rows one by one.

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