## **Create Database: Syntax**

CREATE DATABASE database\_name;

## **Create Database: Example**

CREATE DATABASE DBMS\_Lab;

## **CREATE TABLE: Syntax**

CREATE TABLE table\_name (

column1\_name datatype Size constraints,

column2\_name datatype Size constraints,

...

columnN\_name datatype Size constraints

);

**Describe Table: Syntax**

DESCRIBE table\_name;

## **CREATE TABLE: Example**

CREATE TABLE Student (

ROLL\_NO INT PRIMARY KEY,

NAME VARCHAR(50),

ADDRESS VARCHAR(100),

PHONE VARCHAR(15),

AGE INT

);

**INSERT INTO Statement: Syntax**

There are two primary syntaxes of **INSERT INTO**statements depending on the requirements. The two syntaxes are:

### **Syntax 1. Only Values**

*INSERT INTO table\_name*

*VALUES (value1, value2, value);*

### **Syntax 2. Column Names And Values Both**

*INSERT INTO table\_name (column1, column2, column3)*

*VALUES ( value1, value2, value);*

## **INSERT INTO Multiple Rows: Syntax**

**INSERT INTO** table\_name(Column1,Column2,Column3,.......)

**VALUES**

(Value1, Value2,Value3,.....),

        (Value1, Value2,Value3,.....),

        (Value1, Value2,Value3,.....),

         .............................) ;

**INSERT INTO Multiple Rows: Example**

INSERT INTO Student (ROLL\_NO, NAME, ADDRESS, PHONE, AGE) VALUES

(1, 'Ram', 'Delhi', 'XXXXXXXXXX', 18),

(2, 'Ramesh', 'Gurgaon', 'XXXXXXXXXX', 18),

(3, 'Sujit', 'Rohtak', 'XXXXXXXXXX', 20),

(4, 'Suresh', 'Rohtak', 'XXXXXXXXXX', 18);

**Created Table:**

| ROLL\_NO | NAME | ADDRESS | PHONE | AGE |
| --- | --- | --- | --- | --- |
| 1 | Ram | Delhi | xxxxxxxxxxxxxx | 18 |
| 2 | RAMESH | GURGAON | xxxxxxxxxxxxxx | 18 |
| 3 | SUJIT | ROHTAK | xxxxxxxxxxxxxx | 20 |
| 4 | SURESH | ROHTAK | xxxxxxxxxxxxxx | 18 |

### **Example 1: Inserting Only New Values Using INSERT INTO Example**

**INSERT INTO** Student

**VALUES** ('5','HARSH','WEST BENGAL', 'XXXXXXXXXX','19');

**Output:**

| **ROLL\_NO** | **NAME** | **ADDRESS** | **PHONE** | **Age** |
| --- | --- | --- | --- | --- |
| 1 | Ram | Delhi | XXXXXXXXXX | 18 |
| 2 | RAMESH | GURGAON | XXXXXXXXXX | 18 |
| 3 | SUJIT | ROHTAK | XXXXXXXXXX | 20 |
| 4 | SURESH | Delhi | XXXXXXXXXX | 18 |
| 5 | HARSH | WEST BENGAL | XXXXXXXXXX | 19 |

### **Example 2: Insert Values to Specified Columns Using INSERT INTO**

**INSERT INTO** Student (ROLL\_NO, NAME, Age)

**VALUES** ('5','PRATIK','19');

**Output:**

| **ROLL\_NO** | **NAME** | **ADDRESS** | **PHONE** | **Age** |
| --- | --- | --- | --- | --- |
| 1 | Ram | Delhi | XXXXXXXXXX | 18 |
| 2 | RAMESH | GURGAON | XXXXXXXXXX | 18 |
| 3 | SUJIT | ROHTAK | XXXXXXXXXX | 20 |
| 4 | SURESH | Delhi | XXXXXXXXXX | 18 |
| 5 | PRATIK | null | null | 19 |

### **INSERT INTO SELECT: Syntax**

There are two syntaxes for using INSERT INTO SELECT statement, depending on it’s use.

### Syntax1: Copy All Columns and Insert

**INSERT INTO** first\_table

**SELECT** \*

**FROM** second\_table;

### Syntax2: Copy Specific Columns and Insert

**INSERT INTO** first\_table(names\_of\_columns1)

**SELECT** names\_of\_columns2

**FROM** second\_table;

### **Syntax3: C**opy Specific Rows and Insert

**INSERT INTO** table1

**SELECT \* FROM** table2

**WHERE** condition;

**Create Table: Example**

CREATE TABLE LateralStudent (

ROLL\_NO INT PRIMARY KEY,

NAME VARCHAR(50),

ADDRESS VARCHAR(100),

PHONE VARCHAR(15),

AGE INT

);

**Insert into: Example**

INSERT INTO LateralStudent (ROLL\_NO, NAME, ADDRESS, PHONE, AGE) VALUES

(7, 'Souvik', 'Hydrabad', 'XXXXXXXXXX', 18),

(8, 'Niraj', 'Noida', 'XXXXXXXXXX', 19),

(9, 'Somesh', 'Rohtak', 'XXXXXXXXXX', 20);

**Created Table**

| **ROLL\_NO** | **NAME** | **ADDRESS** | **PHONE** | **Age** |
| --- | --- | --- | --- | --- |
| 7 | SOUVIK | HYDERABAD | XXXXXXXXXX | 18 |
| 8 | NIRAJ | NOIDA | XXXXXXXXXX | 19 |
| 9 | SOMESH | ROHTAK | XXXXXXXXXX | 20 |

### **Example 1: Inserting all rows and columns using INSERT INTO**

**INSERT INTO** Student

**SELECT** \* **FROM** LateralStudent;

**Output:**

| **ROLL\_NO** | **NAME** | **ADDRESS** | **PHONE** | **Age** |
| --- | --- | --- | --- | --- |
| 1 | Ram | Delhi | XXXXXXXXXX | 18 |
| 2 | RAMESH | GURGAON | XXXXXXXXXX | 18 |
| 3 | SUJIT | ROHTAK | XXXXXXXXXX | 20 |
| 4 | SURESH | Delhi | XXXXXXXXXX | 18 |
| 7 | SOUVIK | DUMDUM | XXXXXXXXXX | 18 |
| 8 | NIRAJ | NOIDA | XXXXXXXXXX | 19 |
| 9 | SOMESH | ROHTAK | XXXXXXXXXX | 20 |

### **Example 2: Inserting specific columns using INSERT INTO SELECT**

**INSERT INTO** Student(ROLL\_NO,NAME,Age)

**SELECT** ROLL\_NO, NAME, Age **FROM** LateralStudent;

**Output:**

| **ROLL\_NO** | **NAME** | **ADDRESS** | **PHONE** | **Age** |
| --- | --- | --- | --- | --- |
| 1 | Ram | Delhi | XXXXXXXXXX | 18 |
| 2 | RAMESH | GURGAON | XXXXXXXXXX | 18 |
| 3 | SUJIT | ROHTAK | XXXXXXXXXX | 20 |
| 4 | SURESH | Delhi | XXXXXXXXXX | 18 |
| 7 | SOUVIK | null | null | 18 |
| 8 | NIRAJ | null | null | 19 |
| 9 | SOMESH | null | null | 20 |

### **Example 3: Insert specific rows using INSERT INTO SELECT**

**INSERT INTO** Student

**SELECT** \* **FROM** LateralStudent **WHERE** Age = 18;

**Output:**

| **ROLL\_NO** | **NAME** | **ADDRESS** | **PHONE** | **Age** |
| --- | --- | --- | --- | --- |
| 1 | Ram | Delhi | XXXXXXXXXX | 18 |
| 2 | RAMESH | GURGAON | XXXXXXXXXX | 18 |
| 3 | SUJIT | ROHTAK | XXXXXXXXXX | 20 |
| 4 | SURESH | Delhi | XXXXXXXXXX | 18 |
| 7 | SOUVIK | DUMDUM | XXXXXXXXXX | 18 |