The DESCRIBE or DESC statement in SQL is used to display the structure of a table in a database. It provides metadata about the table, including information about its columns, data types, constraints, and other properties.

**Syntax:**

DESCRIBE table\_name;

or

DESC table\_name;

**Output:**

When you use the DESCRIBE command, it returns the following details about the table:

1. **Field**: The name of the column in the table.
2. **Type**: The data type of the column (e.g., VARCHAR, INT, DATE, etc.).
3. **Null**: Indicates whether the column allows NULL values (YES or NO).
4. **Key**: Shows if the column is indexed or is a key:
   * PRI for primary key.
   * UNI for unique key.
   * MUL for a column with multiple (non-unique) indexes.
5. **Default**: The default value assigned to the column, if any.
6. **Extra**: Additional information about the column, such as auto-increment (auto\_increment).

**Example:**

Assume a table named employees with the following structure:

CREATE TABLE employees (

id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(100) NOT NULL,

position VARCHAR(50),

salary DECIMAL(10, 2),

hire\_date DATE DEFAULT CURRENT\_DATE

);

Running the DESCRIBE command:

DESCRIBE employees;

**Result:**

| **Field** | **Type** | **Null** | **Key** | **Default** | **Extra** |
| --- | --- | --- | --- | --- | --- |
| id | INT | NO | PRI | NULL | auto\_increment |
| name | VARCHAR(100) | NO |  | NULL |  |
| position | VARCHAR(50) | YES |  | NULL |  |
| salary | DECIMAL(10,2) | YES |  | NULL |  |
| hire\_date | DATE | YES |  | CURRENT\_DATE |  |

**Notes:**

* The DESCRIBE command is specific to MySQL and other database systems that support this syntax.
* In other databases (e.g., PostgreSQL, SQL Server), similar functionality can be achieved using system catalog views or commands. For example:
  + PostgreSQL: \d table\_name in psql or querying information\_schema.columns.
  + SQL Server: Using sp\_help table\_name or querying system views like sys.columns.