

# SQL Command Categories & Data Types

## SQL Command Categories

- 1 DDL – CREATE, ALTER, DROP, TRUNCATE, RENAME
- 2 DML – INSERT, UPDATE, DELETE
- 3 DQL – SELECT
- 4 DCL – GRANT, REVOKE
- 5 TCL – COMMIT, ROLLBACK, SAVEPOINT

## SQL Data Types (Used While Creating Tables)

### 1. Numeric Data Types

- 1 INT / INTEGER – Whole numbers
- 2 SMALLINT – Small whole numbers
- 3 BIGINT – Large whole numbers
- 4 DECIMAL(p,s) – Exact decimal values
- 5 FLOAT / DOUBLE – Approximate decimal values

### 2. Character / String Data Types

- 1 CHAR(n) – Fixed-length string
- 2 VARCHAR(n) – Variable-length string
- 3 TEXT – Large text data

### 3. Date and Time Data Types

- 1 DATE – Stores date (YYYY-MM-DD)
- 2 TIME – Stores time
- 3 DATETIME – Stores date and time
- 4 TIMESTAMP – Stores date and time with timezone info

### 4. Boolean Data Type

- 1 BOOLEAN / BOOL – TRUE or FALSE

### 5. Binary / Miscellaneous Data Types

- 1 BLOB – Binary Large Object
- 2 ENUM – List of predefined values

## Example CREATE TABLE Statement

```
CREATE TABLE Employee (  
    emp_id INT PRIMARY KEY,  
    name VARCHAR(50),  
    salary DECIMAL(10,2),  
    joining_date DATE  
);
```