**SQL Commands :**

SQL (Structured Query Language) commands are categorized into different types based on their functionality. Here are the main types:

### ****1. Data Definition Language (DDL)****

DDL commands are used to define or modify the structure of a database (e.g., tables, schemas).

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| **Command** | **Description** |
| CREATE | Creates a new database, table, or object. |
| ALTER | Modifies an existing database object (e.g., table, column). |
| DROP | Deletes a database or table permanently. |
| TRUNCATE | Removes all data from a table without deleting its structure. |
| RENAME | Changes the name of an existing database object. |

### ****2. Data Manipulation Language (DML)****

DML commands handle the manipulation of data within tables.

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| **Command** | **Description** |
| INSERT | Adds new records (rows) into a table. |
| UPDATE | Modifies existing records in a table. |
| DELETE | Removes specific records from a table. |
| SELECT | Retrieves data from one or more tables. |

### ****3. Data Query Language (DQL)****

DQL is primarily used to query the database for retrieving specific data.

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| **Command** | **Description** |
| SELECT | Fetches data from a database. |
| WHERE | Adds conditions to filter records in a query. |

### ****4. Data Control Language (DCL)****

DCL commands manage permissions and access to the database.

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| **Command** | **Description** |
| GRANT | Grants specific permissions to users. |
| REVOKE | Removes permissions from users. |

### ****5. Transaction Control Language (TCL)****

TCL commands manage transactions in the database.

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| **Command** | **Description** |
| COMMIT | Saves all changes made in the current transaction. |
| ROLLBACK | Undoes changes made in the current transaction. |
| SAVEPOINT | Sets a point in a transaction to which you can roll back. |
| SET TRANSACTION | Sets properties for a transaction, such as isolation level. |

### ****6. Additional Common Clauses****

These are used along with SQL commands for advanced data handling.

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| **Command** | **Description** |
| ORDER BY | Sorts the result set in ascending or descending order. |
| GROUP BY | Groups records that have the same values. |
| HAVING | Filters grouped data based on conditions. |
| JOIN | Combines rows from two or more tables based on a related column. |
| LIMIT / TOP | Restricts the number of rows returned in a query result. |

**Examples of SQL Commands:**

1. **CREATE TABLE** (DDL):

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| **CREATE TABLE** Employees (  EmployeeID INT PRIMARY KEY,  **Name** VARCHAR(50),  **Department** VARCHAR(50),  **Salary** DECIMAL(10, 2)  ); |

1. **INSERT INTO** (DML):

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| **INSERT INTO** Employees (EmployeeID, Name, Department, Salary)  **VALUES** (1, 'John Doe', 'HR', 50000); |

1. **SELECT** (DQL):

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| **SELECT** Name, Salary  FROM Employees  **WHERE** Department = 'HR'; |

1. **UPDATE** (DML):

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| **UPDATE** Employees  SET Salary = 55000  **WHERE** EmployeeID = 1; |

1. **DELETE** (DML):

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| **DELETE** FROM Employees  **WHERE** EmployeeID = 1; |

1. **GRANT** (DCL):

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| **GRANT** SELECT, INSERT ON Employees TO user\_name; |

1. **COMMIT** (TCL):

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| **COMMIT;** |