Types of SQL Statements

- ➢ Data Definition Language(DDL)
- ➢ Data Manipulation Language (DML)
- ➢ Data Control Language(DCL)
- ➢ Transaction Control Language(TCL)

SQL Statements

- SQL Statements are used for interacting with:

  - Entities - tables

  - Attributes – columns

  - Tuples – rows with data values

- Types of SQL Statements

  - Data Definition Language (DDL)

  - Data Manipulation Language(DML)

  - Data Control Language(DCL)

  - Transaction Control Language(TCL)

Data Definition Language (DDL)

- Data Definition Language (DDL) are the statements which are used to define, change or drop a database.

- Common DDL statements

  - CREATE   - used to create tables and its columns

  - ALTER – used for altering tables includes – adding and dropping columns and modifying their datatypes

  - TRUNCATE – is used to delete data from table but not the table.

  - DROP – used for deleting tables.

Data Manipulation Language (DML)

- Data Definition Language (DDL) are the statements which are used to read and modify data in tables.

- Referred as CRUD (**C**reate, **R**ead, **U**pdate & **D**elete) operations

- DML statements

  - INSERT - used to insert a row or many rows in table.

  - SELECT – reads or displays data from a table.

  - UPDATE – edit row values in the table.

  - DELETE – remove row or rows of data from a table.

Data Control Language (DCL)

- Data Control Language (DCL) are the statements which are used to give privileges to access the limited Data.

  - Grant - Gives privileges to user for accessing database data.

  - Revoke - Take back for given privileges.

  - Analyse - to collect statistics information about index, cluster, table.

  - Audit - To track the occurrence of a specific SQL statement or all SQL statements during the user sessions.

  - Comment - Write comment to the data table.

Transaction Control Language (TCL)

- Data Control Language (DCL) are the statements which are used to apply the changes permanently save into the database.

  - COMMIT — Permanent work save into database.

  - ROLLBACK — Restore database to original form since the last COMMIT.

  - SAVEPOINT — Create SAVEPOINT for later use ROLLBACK the new changes.

  - SET TRANSACTION — set the transaction properties such as read-write/read only access.

Summary

- Types of SQL Statements
  - DDL
  - DML
  - DCL
  - TCL