

SQL- STRUCTURED QUERY LANGUAGE

What is DATA?

Data is a raw fact / information about any object in consideration.

"Data is a raw-fact which describes the attributes of an Entity"

Example:

Water Bottle → Entity

Height: 20 cm

Color: blue

Capacity: 500 ml

→ Attributes

DATABASE:

"Database is a place or a medium in which we store the data in a Systematic and organized manner "

➤ The basic operations that can be performed on a database are

- CREATE / INSERT
- READ / RETRIEVE
- UPDATE / MODIFY
- DELETE / DROP

➤ These operations are referred as "CRUD" Operations.

DATABASE MANAGEMENT SYSTEM (DBMS):

"It is a software which is used to maintain and manage the database "

- Security and authorization are the two important features that DBMS provides
- We use query language to communicate or interact with DBMS
- DBMS stores the data in the form of files.

RELATIONAL DATABASE MANAGEMENT SYSTEM (RDBMS):

"It is a type of DBMS software in which we store the data In the form of Tables (rows & columns).

- We use SQL to communicate or interact with RDBMS
- RDBMS stores the data in the form of Tables.

OVERVIEW OF SQL STATEMENTS :

1. DATA DEFINITION LANGUAGE (DDL)

- Create
- Alter
- Drop
- Truncate
- Rename

2. DATA MANIPULATION LANGUAGE (DML)

- Insert
- Update
- Delete

3. TRANSACTION CONTROL LANGUAGE (TCL)

- Commit
- Rollback
- Savepoint

4. DATA CONTROL LANGUAGE (DCL)

- Grant
- Revoke

5. DATA QUERY LANGUAGE (DQL)

- Select