

: SQL :

~~LECTURE~~

LECTURE : "Gadde Sandeep"

structured query language (SQL) :

SQL is structured

query language which speaks with data base management system (DBMS). It is used in programming and designed for managing data held in Relational Data Base Management system (RDBMS). "SQL" is categorized into two types

SQL

Relational Data Base Management system

Non Relational Data Base Management system.

Some of the platforms which are used to get & manages data are :

SQL server Express

MySQL

Microsoft SQL server

SQLite

MariaDB

IBM DB2

MongoDB

cassandra

Redis

Apache HBase



## Why SQL?

SQL is used to manage, manipulate, modify, define and control the data in data base management system. SQL sub-languages are categorized into four types:

- 1) DDL - Data definition Language
- 2) DQL - Data query Language
- 3) DML - Data manipulation language
- 4) DCL - Data control language

Note: All the above languages deals with tables which has rows and columns.

DDL (Data definition Language): It is used to modify or create the database tables structures. It deals with variables / features of table. DDL consists SQL commands to define database schema.

Schema: Collection of databases is called Schema.



Ex:

Schema:

↳ Databases

1) Amazon database

2) Flipkart database

3) covid database

etc.,

Commands:-

-- CREATE: It is used to create the objects like tables, function etc.,

-- DROP: It is used to drop ~~the~~ or delete the feature from table.

-- ALTER: It is used to change the constraints and features of table.

-- RENAME: It is used to rename the object existing in the database.

DQL (Data Query Language): It is used to retrieve

relational database from schema, when query is passed into the database (table/object) it calls the specific data.

Commands:-

-- SELECT: is used to retrieve data from database



DML (Data Manipulating Language): It is used to

manipulate the data in the database and perform some of the mathematical operations on the objects features. SQL commands in DML are,

-- INSERT: It is used to insert / put data into the table.

-- UPDATE: It is used to update existing data within a table.

-- DELETE: It is used to delete records from a database table.

DCL (Data Control Language): It is ~~used~~ usually

deals with access, permission's, rights to the user and ~~can~~ other controls of the database.

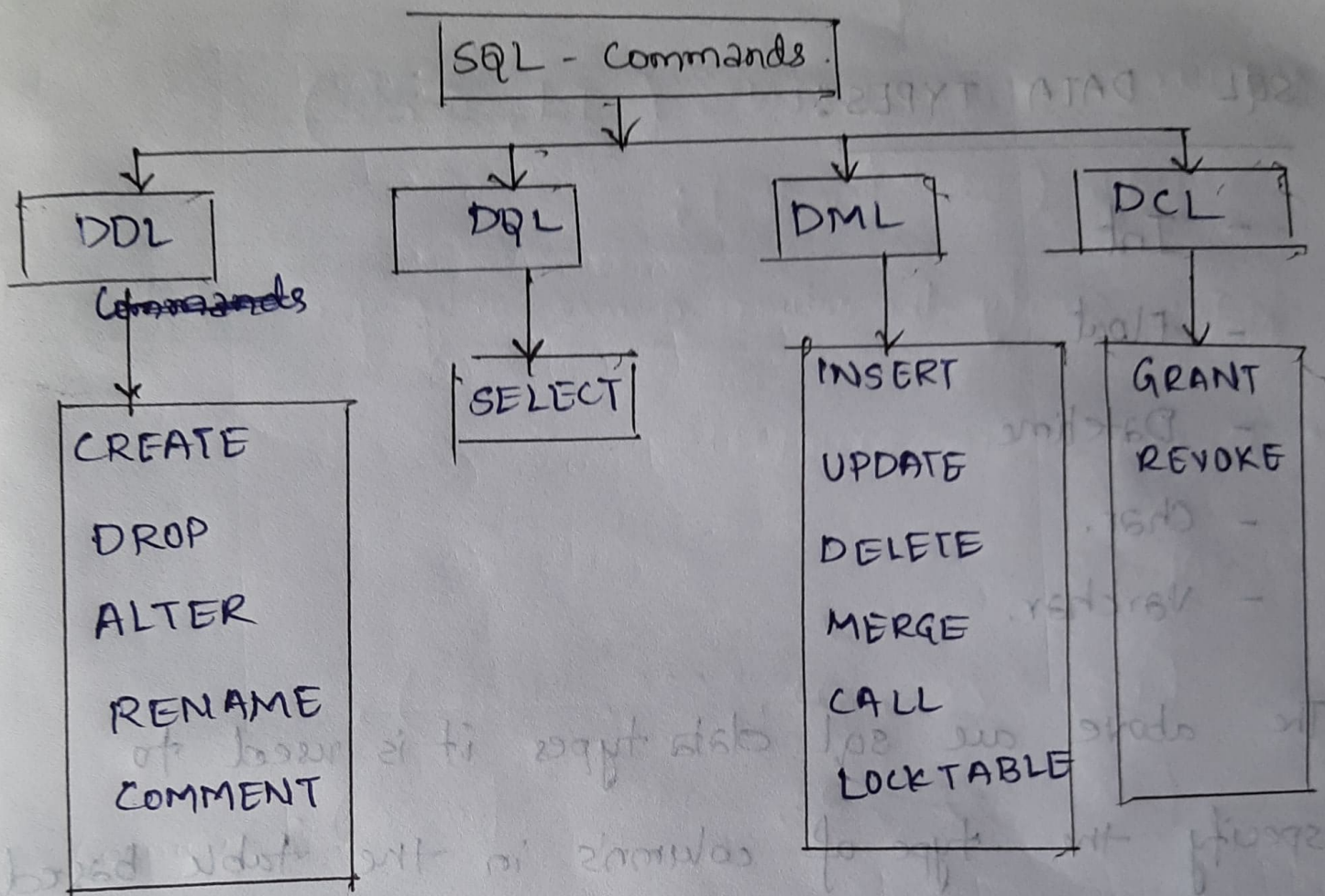
Commands:

-- GRANT: gives user's access privileges to the database.

-- REVOKE: withdraw the user's access privileges

Note: tables consists of rows and columns  
is also called object.





Note: Client is the user who requests data to the database. Server consists of huge data - base and provides the data to the clients (users).