SQL (structured query language)

**1.DDL**: Data Definition Language

A data definition language (DDL) is **a computer language used to create and modify the structure of database objects in a database**. These database objects include views, schemas, tables, indexes, etc..

List of DDL commands:

**.** **CREATE**: This command is used to create the database or its objects (like table, index, function, views, store procedure, and triggers).

* **DROP:** This command is used to delete objects from the database.
* **ALTER:**This is used to alter the structure of the database.
* **TRUNCATE:**This is used to remove all records from a table, including all spaces allocated for the records are removed.
* **COMMENT:** This is used to add comments to the data dictionary.
* **RENAME:**This is used to rename an object existing in the database.
* **2.DQL:** Data query language
* Data Query Language (DQL) is part of the base grouping of SQL sub-languages. These sub-languages are mainly categorized into four categories: a data query language(DQL), a data definition language (DDL), a data control language (DCL), and a data manipulation language (DML).
* List of DQL commands:
* **SELECT:** It is used to retrieve data from the database.
* **3.DML:** Data manipulation language
* A DML (data manipulation language) refers to a computer programming language that allows you to add (insert), delete (delete), and alter (update) data in a database. A DML is typically a sublanguage of a larger database language like SQL, with the DML containing some of the language's operators.
* List of DML commands:
* **INSERT :** It is used to insert data into a table.
* UPDATE: It is used to update existing data within a table.
* **DELETE :** It is used to delete records from a database table.
* **LOCK:** Table control concurrency.
* **CALL:** Call a PL/SQL or JAVA subprogram.
* **EXPLAIN PLAN:** It describes the access path to data.
* **4.DCL:** Data control language
* A data control language (DCL) is **a syntax similar to a computer programming language used to control access to data stored in a database (authorization)**. In particular, it is a component of Structured Query Language (SQL). Data Control Language is one of the logical group in SQL Commands.
* List of DCL commands:
* **GRANT:** This command gives users access privileges to the database.
* **REVOKE:** This command withdraws the user’s access privileges given by using the GRANT command.
* **5.TCL:** Transaction control language
* TCL stands for **Transaction Control Languages**. These commands are used for maintaining consistency of the database and for the management of transactions made by the DML commands. A Transaction is a set of SQL statements that are executed on the data stored in DBMS.
* List of TCL commands:
* **COMMIT:** Commits a Transaction.
* **ROLLBACK:** Rollbacks a transaction in case of any error occurs.
* **SAVEPOINT:** Sets a save point within a transaction.
* SET TRANSACTION: Specify characteristics for the transaction.