

SQL COMMANDS

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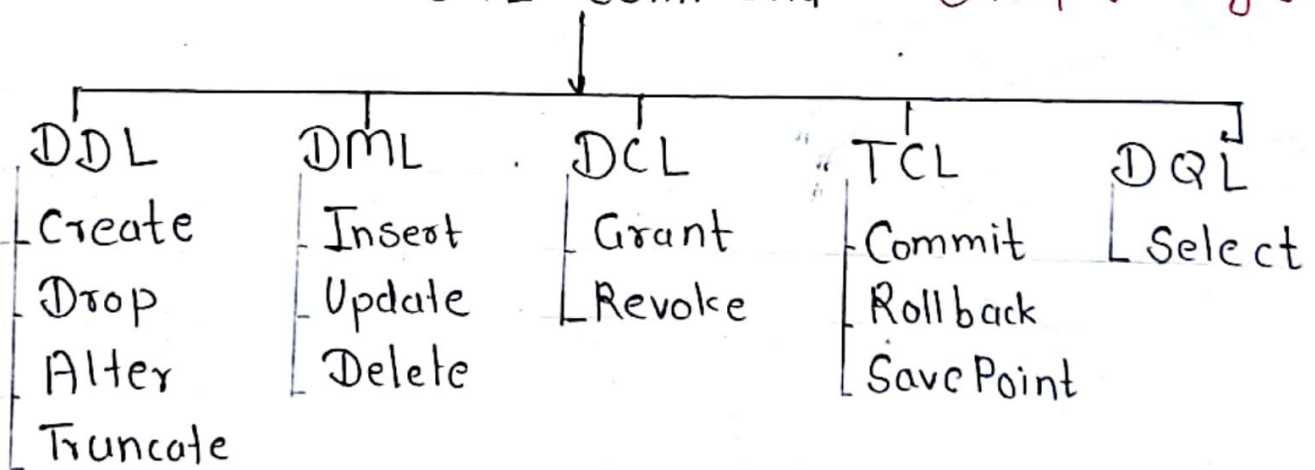
SQL Commands :-

- SQL commands are instructions. It is used to communicate with the database. It is also used to perform specific tasks, functions and queries of data.
- SQL can perform various tasks like create a table, add data to tables, drop the table, modify the table set permission for users.

Types of SQL Commands :-

There are five types of SQL commands :-

SQL Command @the-programming-girl



1. Data Definition Language (DDL)

- DDL changes the structure of the table like creating a table, deleting a table, altering a table, etc
- All the commands of DDL are auto-committed

that means it permanently save all the changes in the database

Here are some commands that come under DDL:

- CREATE
- ALTER
- DROP
- TRUNCATE

a. CREATE:-

It is used to create a new table in the database

Syntax:-

```
CREATE TABLE_NAME (COLUMN_NAME DATATYPE)
```

Example:-

```
CREATE TABLE EMPLOYEE (Name VARCHAR2(20), Email V
```

b. DROP :-

It is used to delete both the structure and record stored in the table

Syntax:-

```
DROP TABLE table-name;
```

Example:-

```
DROP TABLE EMPLOYEE;
```

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c. ALTER:- It is used to alter the structure of the database. This could be either to modify the characteristics of an existing attribute or probably to add a new attribute.

Example:-

```
ALTER TABLE STU-DETAILS ADD (ADDRESS VARCHAR 2(20)
```

```
ALTER TABLE STU-DETAILS MODIFY (NAME VARCHAR 2(20));
```

d. TRUNCATE :-

It is used to delete all the rows from the table and free the space containing the table.

Syntax :-

TRUNCATE TABLE table-name.

Example :-

TRUNCATE TABLE EMPLOYEE; @the-programming-girl

2. DATA Manipulation Language :-

DML commands are used to modify the database

It is responsible for all form of changes in the database. The command of DML is not auto-committed

- INSERT
- UPDATE
- DELETE

a. INSERT :-

The INSERT statement is SQL Query. It is used to insert data into the row of a table.

Syntax :-

INSERT INTO TABLE-NAME
VALUES (value 1, value 2, values --- value n);

b. UPDATE :-

This command is used to update or modify the value of a column in the table.

Syntax :-

UPDATE table-name SET [column-name1 = value1, ... colu_m

c. DELETE :- It is used to remove one or more row from a table.

Example:-

```
DELETE FROM javatpoint  
WHERE Author = "Sonoo";
```

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3. Data Control Language

DCL commands are used to grant and revoke authority from any database user.

o Grant

o Revoke

a. Grant :-

It is used to give user access privileges to database

Example:-

```
Grant SELECT, UPDATE ON MY_TABLE TO SOME_USER, A
```

b. Revoke :-

It is used to take back permissions from the user.

4. Transaction Control Language :-

TCL commands can only use with DML commands like INSERT, DELETE and UPDATE only.

o COMMIT

o ROLLBACK

o SAVEPOINT

a. Commit :-

Commit command is used to save all transaction to the database.

Example:-

```
DELETE From CUSTOMERS  
WHERE AGE = 25;
```

Commit.

Rollback:- Rollback command is used to undo transactions that have not already been saved to the database.

Syntax:-

ROLLBACK

C. SAVEPOINT:-

It is used to roll the transaction back to a certain point without rolling back entire transaction.

Syntax:-

SAVEPOINT SAVEPOINT_NAME

DATA QUERY LANGUAGE:-

DQL is used to fetch the data from the database.

o SELECT

a. SELECT:- This is same as the projection operation of relational algebra. It is used to select the attribute based on the condition

Syntax:-

SELECT expressions
FROM TABLES
WHERE conditions;

Follow For More

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Source - Javatpoint.