

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 command 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

CREATE:

The CREATE TABLE statement is used to create a new table in a database.

Syntax

```
CREATE TABLE table_name (  
    column1 datatype,  
    column2 datatype,  
    column3 datatype,  
    ....  
);
```

The column parameters specify the names of the columns of the table.

The datatype parameter specifies the type of data the column can hold (e.g. varchar, integer, date, etc.).

Example:

```
CREATE TABLE Persons (  
    PersonID int,  
    LastName varchar(255),
```

```
    FirstName varchar(255),  
    Address varchar(255),  
    City varchar(255)  
);
```

DROP

The DROP TABLE statement is used to drop an existing table in a database.

Syntax

```
DROP TABLE table_name;
```

Example:

```
DROP TABLE Shippers;
```

TRUNCATE

The TRUNCATE TABLE statement is used to delete the data inside a table, but not the table itself.

Syntax

```
TRUNCATE TABLE table_name;
```

Example

```
DROP TABLE Shippers;
```

ALTER

The ALTER TABLE statement is used to add, delete, or modify columns in an existing table.

The ALTER TABLE statement is also used to add and drop various constraints on an existing table.

ALTER TABLE - ADD Column

To add a column in a table, use the following syntax:

```
ALTER TABLE table_name  
ADD column_name datatype;
```

Example:

The following SQL adds an "Email" column to the "Customers" table:

```
ALTER TABLE Customers  
ADD Email varchar(255);
```

ALTER TABLE - DROP COLUMN

To delete a column in a table, use the following syntax

```
ALTER TABLE table_name  
DROP COLUMN column_name;
```

The following SQL deletes the "Email" column from the "Customers" table:

Example

```
ALTER TABLE Customers  
DROP COLUMN Email;
```

ALTER TABLE - RENAME COLUMN

To rename a column in a table, use the following syntax:

```
ALTER TABLE table_name
```

RENAME COLUMN old_name to new_name;

Example:

ALTER TABLE Customers RENAME COLUMN PHONE_NUMBER TO
MOBILE_NUMBER;

ALTER TABLE - ALTER/MODIFY DATATYPE

To change the data type of a column in a table, use the following syntax:

ALTER TABLE table_name
MODIFY column_name datatype;

Example:

ALTER TABLE Customers MODIFY NAME VARCHAR(40);