**Commands in sql:**

To create database - create database db\_name;

To list all the dbs- show databases;

To use a specific db- use db\_name;

To delete a specific db – **drop** database db\_name;

To create table- **create table table\_name** ( column\_name\_1 datatype constraint null/not null, column\_name\_2 datatype constraint null/not null, -------) ;

To list all tables in a db – **sh0w tables**;

To see the tables attributes – **desc** table\_name;

**Sql statements:**

**Ddl** (data definition language): create, alter, drop, truncate.

**Dml** (data manipulation language): insert, delete, update.

**Tcl** (transaction control language): commit, rollback, savepoint.

**Dcl** (data control language): grant, revoke.

**Database:** it is a place to store the data in a systematic and organized manner.

**DDL (DATA DEFINITION LANGUAGE): CREATE, ALTER, DROP, TRUNCATE**

**1.Create:** used to create the database, tables.

**Create table table\_name**

(

Column\_name\_1 datatype constraint null/not null,

Column\_name\_2 datatype constraint null/not null,

-------) ;

Ex: create table habitat (id int primary key auto\_increment,

name varchar (64));

To create a table with a foreign key:

Create table animal (id int primary key auto\_increment,

Name varchar (64),

Species varchar (64),

Age int,

Habitat\_id int,

Foreign key (habitat\_id) references habitat(id));

**2.Alter:** used to modify (add rename) the table(column) into existing table.

* Add column

Syntax: alter table table\_name

add column\_name datatype constraint null/not null [after column\_name\_x(optional)]

* Drop column

Syntax: alter table table\_name

drop column\_name;

* Modify datatype

Syntax: alter table table\_name

modify column\_name datatype constraint null/ not null

* Modify null / not null

Syntax: alter table table\_name

modify column\_name existing\_datatype null/ not null

* Change the column name

Syntax: alter table table\_name

change old\_column\_name new\_col\_name existing datatype;

**3. Modify constraints in sql**

Alter table table\_name  
add constraint primary key (column\_name);  
  
alter table table\_name  
add constraint unique (column\_name);  
  
alter table table\_name  
add constraint check (column\_name);  
  
alter table table\_name  
add constraint foreign key (column\_name) references parent\_table\_name (column\_name);

**4.Drop:** this command is used to drop the table.

Syntax:

Drop table table\_name;

Remove primary key

🡪Syntax: alter table table\_name drop primary key;

Remove unique constraint (by constraint name)

🡪 Syntax: alter table table\_name drop index constraint\_name;

Remove foreign key constraint (by constraint name)

🡪 Syntax: alter table table\_name drop foreign key constraint\_name;

Remove check constraint (by constraint name)

🡪 Syntax: alter table table\_name drop check constraint\_name;

**5.Truncate:** this command is used to delete the all records that are present in the table.

Syntax:

Truncate table table\_name;

**(DML)- DATA MANIPULATION LANGUAGE**

**1.Insert**: this command is used to add records inside a table.

* Syntax 1: insert values directly into all columns

Insert into table\_name values (v1, v2, ..., vn), (v1, v2, ..., vn);

* Syntax 2: insert values into specific columns

Insert into table\_name (col1, col2, ..., coln)  
values (v1, v2, ..., vn), (v1, v2, ..., vn);

* Syntax 3: insert data using select statement

Insert into table\_name (col1, col2, ...)  
Select col1, col2, ... From another\_table where condition;

**2.Update:** this command is used to modify the records that are present in the table.

Syntax:

Update table\_name  
set column1 = value1, column2 = value2, ...  
Where condition;

Example:

Update animal  
set age = 10  
where id = 3;

**3.Delete:** this command is used to delete the records that are present in the table.

Syntax:

Delete from table\_name  
[where condition] ;

Example:

Delete from product

Where id=3;

**TCL (TRANSACTION CONTROL LANGUAGE):**

**1. Commit:** used to save all the transactions permanently in the database.

Syntax: Commit;

**2. Rollback**: used to undo transactions that have not yet been saved to the database.

Syntax: Rollback;

**3. Savepoint**: used to set a savepoint within a transaction to which you can later roll back.

Syntax:

Savepoint savepoint\_name;  
rollback to savepoint\_name;