# SQL:

SQL (structured query language) used to manipulate and retrieve data which is stored in a Relational database.

## DataTypes in SQL:

1. Int
2. float
3. Decimal
4. char
5. varchar
6. text
7. Datetime
8. date

## Different types of languages in SQL:

### DDL (data definition language)

1.It works on database table level

2.CREATE,ALTER,DROP,TRUNCATE commands are used in DDL

3.CREATE is used to create tables ( CREATE table <table\_name>)

4.ALTER is used to change the table structure

(ALTER table table\_name

add column\_name )

5.DROP is used to delete a table permanently. (DROP table table\_name)

6.TRUNCATE is used to delete the data in a table but the table structure remain same

(TRUNCATE table table\_name)

### DML (data Manipulation language):

1.To manipulate data in a table DML is used

2.INSERT,UPDATE,DELETE are used in DML

3.INSERT is used to insert records in a table.(INSERT into table\_name values())

4.UPDATE is used to update data in a table row wise (UPDATE table\_name SET “condition”)

5.DELETE is used to delete rows from a table. Rows can be deleted one by one as per condition or all rows together. (DELETE from table\_name where “condition”)

### DQL (data Query language):

1.To retrieve data from database table DQL is used

2.SELECT command is used

3.by select data can be retrieve column wise or all data at once from table

### DCL (data Control language):

1.it is used to give permission to the database to particular users or to all users as well as by DCL the permission can be taken back also

2.GRANT and REVOKE is used

3.GRANT is used to give permission to a user or to a group of users.

(GRANT select,insert

On employee

To trainees;).

4.REVOKE is used to taken back the permission

(REVOKE select,insert

On employee

From trainees;)

### TCL (Transaction Control language):

1.TCL is used to permanently save a change in database by COMMIT,and if mistakenly any update is done then ROLLBACK can be used to back it in the previous state.

3.Example of COMMIT:

UPDATE table\_name

SET “condition”

COMMIT;

\*\* Here the updation in the table will be permanently saved in database

4.Example of ROLLBACK:

UPDATE table\_name

SET “condition”

ROLLBACK;

\*\* Here the transaction will not be completed and go back to the previous state

5.SAVEPOINT save the transaction temporarily.transaction can be rolled back by calling the savepoint.

(ROLLBACK to savepoint\_name;)