SQL: Structured Query Language

1.It is used to communicate with the database

2.By using SQl we can perform different types of operation like   
Ex: Update, delete,Insert,Search

**What SQL Can do:**

**1.SQL can retrieve the data from database or table**

**2.SQL can insert the records into the database**

**3.SQL can update the records**

**4.SQL can delete the records from the table or database**

**5.SQL can create a new table or database**

Oracle11g,MYSQL,PHPMYADMIn

SQL

Database:

Database is collection of tables

Table:

1.Table is a collection of records

2.Table is a collection of rows and columns

Studentinformation

|  |  |  |
| --- | --- | --- |
| Student name | Mno | PINcode |
| Vijay | 888888888 |  |
| Vinay | 46464654 |  |
| Vikrant | 465465456 |  |
| Ajay | 4646465464 |  |
|  |  |  |

Advantages of SQL:

1.No coding required

2.Data manipulate,search,delete etc

**SQL has categorized into different types of commands:**

1.DDL(Data definition Language)

2.DML(Data Manipulation Language)

3.DCL(Data control language)

4.TCL(Transaction control language)

1.DDL(Data definition Language)

It include the change the structure of table like creation of table,altering table etc

1.Create

2.Alter

3.Drop

4.Truncate

5.Rename

**1.Create:**

It is used to create a new table into the database

**2.Alter:**

For modifies the structure of the table

**3.Drop:**

To drop a table permanently from the database

**4.Truncate:**

Remove all record from the table

**5.Rename:**

To rename a table name

2**.DML(Data Manipulation Language)**

**1.Select**:It is used to select or fetch the records from table

2.**Insert**:It is used to insert a new record into the table

3.**Update**:It is used to update the existing records

4.**Delete**:It is used to remove a specific or all record from the table

3. **DCL(Data control language)**

1.**Grant:**It is used to give the permission to user

2.**Revoke:** Take back permission from the user

4**.TCL(Transaction control language)**

1.**Commit:**To save the data permanently

2**.Rollback**: To undo the changes

3.**Savepoint:** To save the data temporarily

1.Create:

It is used to create a table  
Syntax:

Create table table\_name(Col name1 data type,Col name2 datatype)

Ex:

Create table Stinform(SNAME Varchar(50),Mno int,PINcode int);

2.Insert:

1.Insert is used to add the record into the table

Syntax:

Insert into table\_name(Col name1,colname2,colname3) Values (Value1,value2,value3)

Ex:

Insert into Stinform(SNAME,MNO,PINCODE)Values('Vishal',12345,413517);

3.Select:

1.Select is used to fetch the record from the table  
2.By using select we can fetch the partial data from the table

Syntax:

Select \* from table\_name;

Ex:

Select \* from Stinform;

Syntax:

Select Col\_name from table\_name;

Ex:

Select SNAME from Stinform;

4.Update:

Update is used to update the existing records

Syntax:

Update table\_name SET Con\_name=new value where= condition

Ex:

Update Stinform SET MNO=525252 where PINCODE=25415;

Update Stinform SET MNO=99210 where SName='Vikrant';

Update Stinform SET PINCODE=411025 where SNAME='Vishal'

Update Stinform SET SNAME='Ashish' where SNAME='Vijay'

Update Stinform SET SNAME='Ashish' where SNAME='Vijay'

5.Delete:

1.It is used to delete a specific/all record from the table

2.When we delete all record from the table then table structure remains same in db

3.Rollback is possible

Syntax:

Delete from table\_name where=condition

Ex:

Delete from Stinform where SNAME='Ashish';

Syntax:

Delete from table\_name

Ex:

Select \* from Stinform;

6.Truncate:

1.It is used to remove all record from the table

2. When we truncate the table then table structure remains same in db

3.Rollback is not possible

Syntax:

Truncate table table\_name

Ex:

Truncate table Stinform;

7.Drop:

1.Drop is used to remove a table from the database

2.When we drop the table table structure not remains same in db

Syntax:

Drop table table\_name

Ex:

Drop table Stinform;

8.Alter:

We can change or modify the structure of table

Syntax:

Alter table table\_name ADD col\_name data type