Database Programming

SQL Queries

1. **show databases;** :Show all the databases.

2. **create database database_name;** : This query is used to create new database.

3. **use database database_name;** : Used to select the database on which we want to perform the operation.

4. create new table; :

Syntax : Create table table_name(column_name1 datatype, column_name2 datatype, column_name3 datatype, column_name4 datatype …);

e.g. create table student(roll no int, name varchar(255), marks int, city varchar(255));

5. Display the Table Structure :

Syntax : describe table_name;

e.g. describe student;

6. Insert new record into the table:

Syntax : insert into table table_name values(value1, value2, value3,…);

e.g. insert into student values (11, ‘Amit’, 89, ‘Pune’);

7. Fetching data from Table:

Syntax : select * from table_name;

e.g. : select * from student;

8. fetch specific field from table

Syntax : select column_name1, column_name2, …. from table_name;

e.g. select name, city from student;

9. where clause in SQL

Syntax : select column_name1, column_name2, …. from table_name where CONDITION.

e.g. select * from student where marks > 90;

10. Order by clause

Syntax : select * from table_name order by column_name;

e.g. select 8 from student order by marks;

Default ordering is ascending. To change order use keyword asc or desc;

11. Update the record from table

Syntax : update table_name set column_name = value where CONDITION;

e.g. : update student set city = Delhi where roll no = 8;

12. Delete specific record from table

Syntax : delete from table_name where CONDITION;

e.g. delete from student where roll no = 12;

13. Aggregate Functions in SQL

a. Min.

Syntax: select min(column_name) from table_name;
e.g. select min(marks) from student;

b. max.

Syntax: select max(column_name) from table_name;
e.g. select max(marks) from student;

c. sum.

Syntax: select sum(column_name) from table_name;
e.g. select sum(marks) from student;

d. average.

Syntax: select avg(column_name) from table_name;
e.g. select avg(marks) from student;

e. count.

Syntax: select count(column_name) from table_name where CONDITION;
e.g. select count(marks) from student where city = mumbai;

14. Pattern matching in SQL

For pattern matching we have to use ***like*** keywords

For pattern matching we have to use two symbols (%, -)

Syntax: select * from student where name like A---;
e.g. only applicable for string.

15. and operator

Syntax: select * from student where marks >= 60 and marks <= 90;

16. or operator

Syntax: select * from student where city = ‘Pune’ or bcity = nashik;

17. between keyword

Syntax: select * from student where marks between 60 and 90;

18. in keyword

Syntax: select * from student where city in (‘Pune’, ‘Nashk’, ‘Delhi’);

19. wildcard characters in mysql

There are two wildcard characters as (%) and (/) which are used for pattern matching.