Experiment No : 2

DBMS Practical

Name : Nitishkumar

Roll No. : 37

mysql> show databases;

+--------------------+

| Database |

+--------------------+

| information\_schema |

| mysql |

| performance\_schema |

| practice\_example |

| pratice |

| sakila |

| student |

| sys |

| world |

+--------------------+

9 rows in set (0.00 sec)

mysql> use student;

Database changed

**CREATE QUERY**

mysql> create table info(id int(5),name char(10),age int(5),branch char(10));

Query OK, 0 rows affected, 2 warnings (0.02 sec)

**DESC COMMAND**

mysql> DESC info;

+--------+----------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+--------+----------+------+-----+---------+-------+

| id | int | YES | | NULL | |

| name | char(10) | YES | | NULL | |

| age | int | YES | | NULL | |

| branch | char(10) | YES | | NULL | |

+--------+----------+------+-----+---------+-------+

4 rows in set (0.00 sec)

**INSERT QUERY**

mysql> insert into student values

-> (1,"Amey",23,"CSE"),(2,"Rohit",29,"CSE"),(3,"Nikhil",30,"CSE"),(4,"Shailesh",25,"CSe");

Query OK, 4 rows affected (0.03 sec)

Records: 4 Duplicates: 0 Warnings: 0

**SELECT QUERY**

mysql> select \* from info;

+------+------+------+-----------+

| id | name | age | branch |

+------+------+------+-----------+

| 1 | Amey | 23 | CSE |

| 2 | Rohit | 29 | CSE |

| 3 | Nikhil | 30 | CSE |

| 4 | Shailesh | 25 | CSE |

+------+------+------+-----------+

4 rows in set (0.00 sec)

**ALTER QUERY**

mysql> alter table info add marks int(3);

Query OK, 0 rows affected (0.03 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> select \* from info;

+------+------+------+-----------+---------+

| id | name | age | branch | company |

+------+------+------+-----------+---------+

| 1 | Amey | 23 | CSE | NULL |

| 2 | Rohit | 29 | CSE | NULL |

| 3 | Nikhil | 30 | CSE | NULL |

| 4 | Shailesh | 25 | CSE | NULL |

+------+------+------+-----------+---------+

4 rows in set (0.00 sec)

**DROP QUERY**

mysql> alter table info DROP marks;

Query OK, 0 rows affected (0.01 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> select \* from info;

+------+------+------+-----------+

| id | name | age | branch |

+------+------+------+-----------+

| 1 | Amey | 23 | CSE |

| 2 | Rohit | 29 | CSE |

| 3 | Nikhil | 30 | CSE |

| 4 | Shailesh | 25 | CSE |

+------+------+------+-----------+

4 rows in set (0.00 sec)

**UPDATE QUERY**

mysql> update info

-> set marks=95

-> where age >21;

Query OK, 4 rows affected (0.03 sec)

Rows matched: 4 Changed: 4 Warnings: 0

mysql> select \* from info;

+------+------+------+-----------+-----------+

| id | name | age | branch | marks |

+------+------+------+-----------+-----------+

| 1 | Amey | 23 | CSE | 95 |

| 2 | Rohit | 29 | CSE | 95 |

| 3 | Nikhil | 30 | CSE | 95 |

| 4 | D | 25 | CSE | 95 |

+------+------+------+-----------+-----------+

4 rows in set (0.00 sec)

**AGGREGATE FUNCTIONS**

**COUNT**

mysql> select count(age)

-> from info;

+------------+

| count(age) |

+------------+

| 4 |

+------------+

1 row in set (0.01 sec)

**AVG**

mysql> select avg(age)

-> from info

-> where age >21;

+----------+

| avg(age) |

+----------+

| 26.7500 |

+----------+

1 row in set (0.00 sec)

**MIN**

mysql> select min(age) from info;

+----------+

| min(age) |

+----------+

| 23 |

+----------+

1 row in set (0.00 sec)

**MAX**

mysql> select max(age)

-> from info;

+----------+

| max(age) |

+----------+

| 30 |

+----------+

1 row in set (0.00 sec)

**CLAUSES**

**GROUP BY & HAVING CLAUSE**

mysql> select \* from info

-> group by

-> age

-> having min(age )>23;

+------+------+------+-----------+

| id | name | age | branch |

+------+------+------+-----------+

| Rohit | B | 29 | CSE |

| Nikhil | C | 30 | CSE |

| Shailesh| D | 25 | CSE |

+------+------+------+-----------+

3 rows in set (0.01 sec)

**ORDER BY CLAUSE**

mysql> select \* from info

-> order by age;

+------+------+------+-----------+

| id | name | age | branch |

+------+------+------+-----------+

| 1 | Amey | 23 | CSE |

| 4 | Shailesh | 25 | CSE |

| 2 | Rohit | 29 | CSE |

| 3 | Nikhil | 30 | CSE |

+------+------+------+-----------+

4 rows in set (0.03 sec)

**ORDER BY IN DESC**

mysql> select \* from info

-> order by age DESC;

+------+------+------+-----------+

| id | name | age | branch |

+------+------+------+-----------+

| 3 | Nikhil | 30 | CSE |

| 2 | Rohit | 29 | CSE |

| 4 | Shailesh | 25 | CSE |

| 1 | Amey | 23 | CSE |

+------+------+------+-----------+

4 rows in set (0.00 sec)

**EXPERIMENT NO : 3**

**DBMS**

**NAME : Nitishkumar**

**Roll No. : 37**

**QUERIES**

mysql> show databases;

+--------------------+

| Database |

+--------------------+

| information\_schema |

| college |

| mysql |

| performance\_schema |

| presentation |

| test |

| world |

+--------------------+

18 rows in set (0.00 sec)

mysql> use college;

Database changed

mysql> show tables;

+--------------------+

| Tables\_in\_college |

+--------------------+

| student |

+--------------------+

1 row in set (0.00 sec)

mysql> select \* from student;

+------+------+--------+

| id | name | rollno |

+------+------+--------+

| 1 | Amey | 11 |

| 2 | Rohit | 12 |

| 3 | Nikhil | 13 |

| 4 | Shailesh | 17 |

+------+------+--------+

4 rows in set (0.00 sec)

mysql> create table info(rollno int,deptno int);

Query OK, 0 rows affected (0.12 sec)

mysql> insert into info(rollno,deptno)

-> values (11,101),(12,202),(13,201),(17,209);

Query OK, 4 rows affected (0.02 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> select \* from info;

+--------+--------+

| rollno | deptno |

+--------+--------+

| 11 | 101 |

| 12 | 202 |

| 13 | 201 |

| 17 | 209 |

+--------+--------+

4 rows in set (0.00 sec)

**NATURAL JOIN**

mysql> select \*

-> from student

-> NATURAL JOIN info;

+--------+------+------+--------+

| rollno | id | name | deptno |

+--------+------+------+--------+

| 11 | 1 | Amey | 101 |

| 12 | 2 | Rohit | 202 |

| 13 | 3 | Nikhil | 201 |

| 17 | 4 | Shailesh | 209 |

+--------+------+------+--------+

4 rows in set (0.02 sec)

**INNER JOIN**

mysql> select student.id,student.name,info.deptno

-> from student INNER JOIN info

-> on student.rollno=info.rollno;

+------+------+--------+

| id | name | deptno |

+------+------+--------+

| 1 | Amey | 101 |

| 2 | Rohit | 202 |

| 3 | Nikhil | 201 |

| 4 | Shailesh | 209 |

+------+------+--------+

4 rows in set (0.00 sec)

**LEFT JOIN**

mysql> select student.id,student.name,info.deptno

-> from student LEFT JOIN info

-> on student.rollno=info.rollno;

+------+------+--------+

| id | name | deptno |

+------+------+--------+

| 1 | Amey | 101 |

| 2 | Rohit | 202 |

| 3 | Nikhil | 201 |

| 4 | Shailesh | 209 |

+------+------+--------+

4 rows in set (0.00 sec)

**RIGHT JOIN**

mysql> select student.id,student.name,info.deptno

-> from student RIGHT JOIN info

-> on student.rollno=info.rollno;

+------+------+--------+

| id | name | deptno |

+------+------+--------+

| 1 | Amey | 101 |

| 2 | Rohit | 202 |

| 3 | Nikhil | 201 |

| 4 | Shailesh | 209 |

| NULL | NULL | 77 |

| NULL | NULL | 19 |

+------+------+--------+

6 rows in set (0.00 sec)

mysql> ALTER table student DROP column id;

Query OK, 4 rows affected (0.13 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> select \* from student ;

+------+--------+

| name | rollno |

+------+--------+

| Amey | 11 |

| Rohit | 12 |

| Nikhil | 13 |

| Shailesh | 17 |

+------+--------+

4 rows in set (0.00 sec)

**UNION OPERATION**

mysql> select \* from student

-> UNION

-> select \* from info;

+------+--------+

| name | rollno |

+------+--------+

| Amey | 11 |

| Rohit | 12 |

| Rohit | 13 |

| Shailesh | 17 |

| 11 | 101 |

| 12 | 202 |

| 13 | 201 |

| 17 | 209 |

| 15 | 77 |

| 23 | 19 |

+------+--------+

10 rows in set (0.00 sec)

**UNION ALL OPERATION**

mysql> select \* from student

-> UNION ALL

-> select \* from info;

+------+--------+

| name | rollno |

+------+--------+

| Amey | 11 |

| Rohit | 12 |

| Rohit | 13 |

| Shailesh | 17 |

| 11 | 101 |

| 12 | 202 |

| 13 | 201 |

| 17 | 209 |

| 15 | 77 |

| 23 | 19 |

+------+--------+

10 rows in set (0.00 sec)

**INTERSECTION PERATION**

mysql> select \* from student

-> INTERSECT

-> select \* from info;

Empty set (0.00 sec)

**MINUS OPERATION**

mysql> select \* from student

-> MINUS

-> select \* from info;

+------+------+--------+

| id | name | rollno |

+------+------+--------+

| 1 | Amey | 11 |

| 2 | Rohit | 12 |

| 3 | Nikhil | 13 |

| 4 | Shailesh | 17 |

+------+------+--------+

4 rows in set (0.00 sec)

**EXPT NO 4**

**DBMS**

**Name : Nitishkumar**

**Roll No. : 37**

**AUTHORIZATION (GRANT & REVOKE)**

mysql> create database customer;

Query OK, 1 row affected (0.05 sec)

mysql> use customer;

Database changed

mysql> create table info(id int, name char(10), age int , city char(10));

Query OK, 0 rows affected (0.06 sec)

mysql> insert into info values

->(1,"A",29,"mohol"),(2,"B",28,"Solapur"),(3,"C",29,"Bale"),(4,"D",22,"akkalkot"),(5,"E",26,"pune");

Query OK, 5 rows affected (0.04 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> select \* from INFO;

+------+------+------+----------+

| id | name | age | city |

+------+------+------+----------+

| 1 | Amey | 29 | mohol |

| 2 | Rohit | 28 | Solapur |

| 3 | Nikhil | 29 | Bale |

| 4 | Shailesh | 22 | akkalkot |

| 5 | Laxmiputra | 26 | pune |

+------+------+------+----------+

5 rows in set (0.00 sec)

mysql> create user 'Prathmesh' identified by 'Ram' password heybro;

Query OK, 0 rows affected (0.06 sec)

**GRANT QUERY**

mysql> GRANT select,update on info to Prathmesh;

Query OK, 0 rows affected (0.01 sec)

mysql> GRANT delete on info to Prathmesh;

Query OK, 0 rows affected (0.03 sec)

mysql> select \* from info;

+------+------+------+----------+

| id | name | age | city |

+------+------+------+----------+

| 1 | Amey | 29 | mohol |

| 2 | Rohit | 28 | Solapur |

| 3 | Nikhil | 29 | Bale |

| 4 | Shailesh | 22 | akkalkot |

| 5 | Laxmiputra | 26 | pune |

+------+------+------+----------+

5 rows in set (0.00 sec)

**REVOKE QUERY**

mysql> REVOKE select,update on info from Prathmesh;

Query OK, 0 rows affected (0.01 sec)

mysql> REVOKE delete on info from Prathmesh;

Query OK, 0 rows affected (0.03 sec)

mysql> select \* from info;

+------+------+------+----------+

| id | name | age | city |

+------+------+------+----------+

| 1 | Amey | 29 | mohol |

| 2 | Rohit | 28 | Solapur |

| 3 | Nikhil | 29 | Bale |

| 4 | Shailesh | 22 | akkalkot |

| 5 | Laxmiputra | 26 | pune |

+------+------+------+----------+

5 rows in set (0.00 sec)

**IMPLEMENTATION OF VIEW**

mysql> create view info\_view as select id,name,age from info where age>23;

Query OK, 0 rows affected (0.03 sec)

mysql> select \* from A\_view ;

+------+------+------+

| id | name | age |

+------+------+------+

| 1 | Amey | 29 |

| 2 | Rohit | 28 |

| 3 | Nikhil | 29 |

| 5 | Laxmiputra | 26 |

+------+------+------+

3 rows in set (0.00 sec)

**UPDATE QUERY ON VIEW**

mysql> update info\_view set name="Ram" where age =26;

Query OK, 2 rows affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select \* from info\_view ;

+------+------+------+

| id | name | age |

+------+------+------+

| 1 | Amey | 29 |

| 2 | Rohit | 28 |

| 3 | Nikhil | 29 |

| 5 |Ram | 26 |

+------+------+------+

3 rows in set (0.00 sec)