Date: 12/04/2024

Assignment

1.   Create a database "college".

> mysql>create database college;
> Query OK, 1 row affected (0.01 sec)
> mysql> use college;
> Database changed

2. Create a table 'student' with columns (id, name, date of birth, gender, branch, section, year, address) under the "college" database.

mysql> Create table student(id int,name varchar(10),Dob date,gender varchar(10),branch

varchar(10),section varchar(10),year int,address varchar(10));

Query OK, 0 rows affected (0.03 sec)

mysql> desc student;

| Field | Type | Null | Key | Default | Extra |
+---------+-------------+------+-----+---------+-------+
id	int	YES		NULL	
name	varchar(10)	YES		NULL	
Dob	date	YES		NULL	
gender	varchar(10)	YES		NULL	
branch	varchar(10)	YES		NULL	
section	varchar(10)	YES		NULL	
year	int	YES		NULL	
address	varchar(10)	YES		NULL	

3. Insert 10 rows into the table.

mysql> insert into student (id,name,doB,gender,branch,section,year,address)
values(01,'Navya','2002-03-29','F','CSE','A',2024,'Shimoga');
Query OK, 1 row affected (0.03 sec)
mysql> insert into student (id,name,doB,gender,branch,section,year,address)
values(02,'Arya','1988-12-22','M','ISE','A',2022,'Mysure');
Query OK, 1 row affected (0.01 sec)

mysql> insert into student (id,name,doB,gender,branch,section,year,address)
values(03,'Shreyas','2000-11-12','M','CSE','A',2023,'Gadag');
 Query OK, 1 row affected (0.01 sec)

mysql> insert into student (id,name,doB,gender,branch,section,year,address)
values(04,'Shravya','20006-01-04','F','ECE','C',2022,'Shimoga');
Query OK, 1 row affected (0.01 sec)

mysql> insert into student (id,name,doB,gender,branch,section,year,address)
values(05,'Anvith','2022-12-10','M','Mech','D',2024,'Durga');
Query OK, 1 row affected (0.01 sec)

mysql> insert into student (id,name,doB,gender,branch,section,year,address)
values(06,'Adharsh','2021-6-1','F','CSE','D',2,'shivamoga');
Query OK, 1 row affected (0.01 sec)

mysql> insert into student (id,name,doB,gender,branch,section,year,address)
values(07,'Ramya','1992-6-1','F','ISE','A',3,'Mangalore');
Query OK, 1 row affected (0.01 sec)

mysql> insert into student (id,name,doB,gender,branch,section,year,address)
values(08,'Srushti','1994-6-1','F','CSE','A',3,'Mysore');
Query OK, 1 row affected (0.01 sec)

mysql> insert into student (id,name,doB,gender,branch,section,year,address)
values(09,'Swathii','1996-3-5','F','CSE','B',2,'Maravanthe');
Query OK, 1 row affected (0.01 sec)

mysql> insert into student (id,name,doB,gender,branch,section,year,address)
values(10,'Sushanth','1998-3-5','M','CSE','B',5,'Padil');
Query OK, 1 row affected (0.01 sec)

mysql> select * from student;

```
+------+----------+------------+--------+--------+---------+------+------------+
| id   | name     | dOB        | gender | branch | section | year | address    |
+------+----------+------------+--------+--------+---------+------+------------+
|   01 | Navya    | 2002-03-29 | F      | CSE    | A       | 2024 | Shimoga    |
|   02 | Arya     | 1988-12-22 | M      | ISE    | A       | 2022 | Mysure     |
|   03 | Shreyas  | 2000-11-12 | M      | CSE    | A       | 2023 | Gadag      |
|   04 | Shravya  | 2006-01-04 | F      | ECE    | C       | 2022 | Shimoga    |
|   05 | Anvith   | 2022-12-10 | M      | Mech   | D       | 2024 | Durga      |
|   06 | Adharsh  | 2021-06-01 | F      | CSE    | D       |    2 | shivamoga  |
|   07 | ananya   | 1992-06-01 | F      | ISE    | A       |    3 | Mangalore  |
|   08 | Swathi   | 1994-06-01 | F      | CSE    | A       |    3 | Mysore     |
|   09 | Swathi   | 1996-03-05 | F      | CSE    | B       |    2 | Maravanthe |
|   10 | Sushanth | 1998-03-05 | M      | CSE    | B       |    5 | Padil      |
```

```
+------+----------+------------+--------+--------+---------+------+-----------+
```

10 rows in set (0.01 sec)

4. Create a user with username: 'admin' and password: 'admin@123' with all the permissions like select, create, alter, drop, truncate, insert, update, and delete.

mysql> create user 'admin'@'localhost' identified by 'admin@123';
Query OK, 0 rows affected (0.02 sec)
mysql>grant select, create, alter , insert, update, delete on college. * TO 'admin'@'localhost';

Query OK, 0 rows affected (0.02 sec)

5. Create user username: 'principal' and password: 'principal@123' with select, insert, update, and delete permissions.

mysql> create user principal identified by 'principal@123';

Query OK, 0 rows affected (0.02 sec)

mysql> grant select,

-> insert, update, delete on student to principal;

Query OK, 0 rows affected (0.01 sec)

6. Create user username: 'faculty' and password: 'faculty@123' with select, and update permissions.
create user faculty identified by 'faculty@123';
Query OK, 0 rows affected (0.03 sec)
mysql> grant select,update on student to faculty;

7. Create user username: 'student' without a password and with select permission only.
mysql> create user student;
Query OK, 0 rows affected (0.01 sec)
mysql> grant select on student to student;
Query OK, 0 rows affected (0.01 sec).

8. Login with the 'admin' user and add a new column phone number.

```
C:\Program Files\MySQL\MySQL Server 8.0\bin>mysql -u admin -p
Enter password: *********
Welcome to the MySQL monitor. Commands end with; or \g.
Your MySQL connection id is 31
Server version: 8.0.36 MySQL Community Server - GPL
Copyright (c) 2000, 2024, Oracle and/or its affiliates.
Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> use college;
Database changed
mysql> alter table student add column phone_number varchar(20);
Query OK, 0 rows affected (0.26 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

9. Login with the 'student' user and display the following outputs:

a. Display all the student data records.

```
+------+----------+------------+--------+--------+---------+------+------------+
| id   | name     | dOB        | gender | branch | section | year | address    |
+------+----------+------------+--------+--------+---------+------+------------+
|  01  | Navya    | 2002-03-29 | F      | CSE    | A       | 2024 | Shimoga    |
|  02  | Arya     | 1988-12-22 | M      | ISE    | A       | 2022 | Mysure     |
|  03  | Shreyas  | 2000-11-12 | M      | CSE    | A       | 2023 | Gadag      |
|  04  | Shravya  | 2006-01-04 | F      | ECE    | C       | 2022 | Shimoga    |
|  05  | Anvith   | 2022-12-10 | M      | Mech   | D       | 2024 | Durga      |
|  06  | Adharsh  | 2021-06-01 | F      | CSE    | D       |    2 | shivamoga  |
|  07  | ananya   | 1992-06-01 | F      | ISE    | A       |    3 | Mangalore  |
|  08  | Swathi   | 1994-06-01 | F      | CSE    | A       |    3 | Mysore     |
|  09  | Swathi   | 1996-03-05 | F      | CSE    | B       |    2 | Maravanthe |
|  10  | Sushanth | 1998-03-05 | M      | CSE    | B       |    5 | Padil      |
+------+----------+------------+--------+--------+---------+------+------------+
```

10 rows in set (0.01 sec)

b. Display only one student data record with any given phone number.

```
mysql> select * from student where phone_no='9012348909';
+------+----------+------------+--------+--------+---------+------+------------+----------+
| id   | name     | dOB        | gender | branch | section | year | address    | phone_no |
+------+----------+------------+--------+--------+---------+------+------------+----------+
|  01  | Navya    | 2002-03-29 | F      | CSE    | A       | 2024 | Shimoga    | 9012348909 |
```

c. Display students from any one branch

```
mysql> select * from student where branch='CSE';
+------+----------+------------+--------+--------+---------+------+-----------+
| id   | name     | dOB        | gender | branch | section | year | address   |
+------+----------+------------+--------+--------+---------+------+-----------+
|   01 | Navya    | 2002-03-29 | F      | CSE    | A       | 2024 | Shimoga   |
|   03 | Shreyas  | 2000-11-12 | M      | CSE    | A       | 2023 | Gadag     |
|   06 | Adharsh  | 2021-06-01 | F      | CSE    | D       |    2 | shivamoga |
|   08 | Swathi   | 1994-06-01 | F      | CSE    | A       |    3 | Mysore    |
|   09 | Swathi   | 1996-03-05 | F      | CSE    | B       |    2 | Maravanthe|
|   10 | Sushanth | 1998-03-05 | M      | CSE    | B       |    5 | Padil     |
6 rows in set (0.01 sec)
```

d. Display students from any specific branch and specific section.

```
select * from student where branch='ISE' and section='A';
+------+--------+------------+--------+--------+---------+------+-----------+
| id   | name   | dOB        | gender | branch | section | year | address   |
+------+--------+------------+--------+--------+---------+------+-----------+
|  0 2 | Arya   | 1998-11-20 | M      | ISE    | A       | 2022 | Mysure    |
|  0 7 | ananya | 1988-12-2  | F      | ISE    | A       | 2022 | Mangalore |
+------+--------+------------+--------+--------+---------+------+-----------+
2 rows in set (0.00 sec)
```

e. Display girl students from the table.

```
mysql> select * from student where gender='F';
+------+---------+------------+--------+--------+---------+------+-----------+
| id   | name    | dOB        | gender | branch | section | year | address   |
+------+---------+------------+--------+--------+---------+------+-----------+
|  0 1 | Navya   | 2002-02-29 | F      | CSE    | B       | 2023 | Ujire     |
|   04 | Shravya | 2006-01-04 | F      | ECE    | C       | 2022 | Shimoga   | 06 |
```

Adharsh | 2021-06-01 | F | CSE | D | 2 | shivamoga|

```
|   07 | ananya  | 1992-06-01 | F      | ISE    | A       |    3 | Mangalore |
|   08 | Swathi  | 1994-06-01 | F      | CSE    | A       |    3 | Mysore    |
```

| 09 | Swathi | 1996-03-05 | F | CSE | B | 2 | Maravanthe |
+------+---------+------------+--------+--------+---------+------+-----------+
6 rows in set (0.00 sec)