- 1. Create a database "college". mysql> create database college; Query OK, 1 row affected (0.06 sec)
- 2. Create a table 'student' with columns (id, name, date of birth, gender, branch, section, year, address) under the "college" database. mysql> use college; Database changed mysql> create table student (id int primary key, name varchar(10), date_of_birth date, gender char(1), branch varchar(10), section char(1), year int, address varchar(10)); Query OK, 0 rows affected (0.10 sec)
- 3. Insert 10 rows into the table. mysql> insert into student (id,name,date_of_birth,gender,branch,section,year,address) values (101,'Larine','2002-10-15','F','cse','A',2024,'Beltangady'); Query OK, 1 row affected (0.05 sec) mysql> insert into student (id,name,date_of_birth,gender,branch,section,year,address) values (102,'Keerthana','2002-09-29','F','cse','A',2024,'ujre'), (103,'Nishmitha','2003-03-09','F','cse','A',2024,'darmastala'), (104,'Shamla','2001-0926','F','cse','A',2024,'vitla'), (105,'Poornima','2001-0902','F','cse','A',2024,'darmastala');

Query OK, 4 rows affected (0.04 sec) Records:

4 Duplicates: 0 Warnings: 0

mysql> insert into student (id,name,date_of_birth,gender,branch,section,year,address) values (106,'Deena','2002-09-04','F','bds','E',2024,'badyar'), (107,'Jasmine','2003-0809','F','eee','F',2024,'manglore'), (108,'John','2001-09-21','M','ece','B',2024,'vitla'), (109,'Poornima K','2003-09-02','F','cse','A',2025,'darmastala'), (110,'Manvi','2003-0529','F','cse','A',2025,'Shirlalu');

Query OK, 5 rows affected (0.04 sec) Records: 5 Duplicates: 0 Warnings: 0

mysql> select * from student;

```
+----+-----+-----+------+------+
            | date of birth | gender | branch | section | year | address |
+----+-----+-----+-----+
| 101 | Narendra | 2002-10-15 | M
                                  cse
                                       |A|
                                              | 2024 | Beltangady |
| 102 | Varun | 2002-09-29 | M
                              cse A
                                         | 2024 | ujre
| 103 | kiran | 2003-03-09 | M
                             cse A
                                       | 2024 | darmastala |
            | 2001-09-26 | M
                                            | 2024 | vitla
                                cse A
| 104 | Suresh
| 105 | Poornima | 2001-09-02 | F
                                cse A
                                            | 2024 | darmastala |
| 106 | Deena
              | 2002-09-04 | F
                                | bds | E
                                            | 2024 | badyar
| 107 | Jasmine | 2003-08-09 | F
                                eee | F
                                            | 2024 | manglore |
| 108 | John
             | 2001-09-21 | M
                                ece B
                                            | 2024 | vitla
| 109 | Poornima K | 2003-09-02 | F | cse | A
                                           | 2025 | darmastala |
            | 2003-05-29 | F | cse | A
                                         | 2025 | Shirlalu |
| 110 | Manvi
10 rows in set (0.00 \text{ 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 identified by 'admin@123'; Query OK, 0 rows affected (0.07 sec)

mysql> grant select, create, alter, drop, truncate, insert, update, delete on college.student to admin; ERROR 3619 (HY000): Illegal privilege level specified for student

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 (0.06 sec)

```
mysql> grant select, -> insert, update, delete on student to principal; Query OK, 0 rows affected (0.05 sec)
```

- 6. Create user username: 'faculty' and password: 'faculty@123' with select, and update permissions. mysql> create user faculty identified by 'faculty@123'; Query OK, 0 rows affected (0.06 sec) mysql> grant select,update on student to faculty; Query OK, 0 rows affected (0.04 sec)
- 7. Create user username: 'student' without a password and with select permission only. mysql> create user student; Query OK, 0 rows affected (0.05 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. mysql> use college; ERROR 1044 (42000): Access denied for user 'admin'@'%' to database 'college'
- 9. Login with the 'principal' user and add 5 more new rows to the table with all column values including phone numbers. mysql> alter table student add (ph int);

ERROR 1142 (42000): ALTER command denied to user 'principal'@'localhost' for table 'student'

10. Login with the 'faculty' user and update all the 10 students' phone numbers.

mysql> alter table student add(ph int); ERROR 1142 (42000): ALTER command denied to user 'faculty'@'localhost' for table 'student'

- 11. Login with the 'student' user and display the following outputs:
 - a. Display all the student data records.

```
| 101 | Narendra | 2002-10-15 | M
                                    cse A
                                               | 2024 | Beltangady |
                             | cse | A | 2024 | ujre
  | 102 | Varun | 2002-09-29 | M
  | 103 | kiran | 2003-03-09 | M | cse | A | 2024 | darmastala |
  | 104 | Suresh | 2001-09-26 | M | cse | A | 2024 | vitla
                                 cse A
  | 105 | Poornima | 2001-09-02 | F
                                           | 2024 | darmastala |
               | 2002-09-04 | F | bds | E
  | 106 | Deena
                                           | 2024 | badyar |
  | 107 | Jasmine | 2003-08-09 | F
                                eee F
                                            | 2024 | manglore |
               | 2001-09-21 | M | ece | B
  | 108 | John
                                            | 2024 | vitla
  | 109 | Poornima K | 2003-09-02 | F | cse | A | 2025 | darmastala |
  | 110 | Manvi | 2003-05-29 | F | cse | A
                                            | 2025 | Shirlalu |
  | 111 | Jay
             | 2009-03-09 | M | cse | D | 2024 | ujre
  +----+-----+-----+-----+------+
  11 rows in set (0.00 sec)
b. Display only one student data record with any given phone number.
  mysql> alter table student add (ph int);
  ERROR 1142 (42000): ALTER command denied to user 'student'@'localhost'
  for table 'student'
c. Display students from any one branch mysql> select * from student
  where branch='ece';
  +----+-----+-----+
  | id | name | date of birth | gender | branch | section | year | address |
  +----+-----+-----+-----+
  | 108 | John | 2001-09-21 | M | ece | B
                                         | 2024 | vitla |
  +----+-----+-----+
  1 row in set (0.04 sec)
d. Display students from any specific branch and specific section. mysql>
  select * from student where branch='cse' and section='A';
  +----+
  | id | name | date of birth | gender | branch | section | year | address |
  +----+-----+----+-----+------+
  | 101 | Narendra | 2002-10-15 | M | cse | A | 2024 | Beltangady |
  | 102 | varun | 2002-09-29 | M | cse | A | 2024 | ujre
  | 103 | kiran | 2003-03-09 | M | cse | A | | 2024 | darmastala |
  | 104 | Suresh | 2001-09-26 | M | cse | A | 2024 | vitla
  | 105 | Poornima | 2001-09-02 | F | cse | A | 2024 | darmastala |
  | 109 | Poornima K | 2003-09-02 | F | cse | A | 2025 | darmastala |
  | 110 | Manvi | 2003-05-29 | F | cse | A | 2025 | Shirlalu |
  +----+-----+-----+------+------+
  7 rows in set (0.00 sec)
e. Display girl students from the table.
  mysql> select * from student where gender='F';
  | 105 | Poornima | 2001-09-02 | F | cse | A
                                           | 2024 | darmastala |
  | 106 | Deena
               | 2002-09-04 | F | bds | E | 2024 | badyar
  | 107 | Jasmine | 2003-08-09 | F | eee | F | 2024 | manglore |
  | 109 | Poornima K | 2003-09-02 | F | cse | A | 2025 | darmastala |
```

- 12. Revoke all the permissions from the user 'admin'. mysql> revoke insert on student from admin; Query OK, 0 rows affected (0.05 sec)
- 13. Revoke only insert permission from the user 'principal'. mysql> revoke insert on student from principal; Query OK, 0 rows affected (0.04 sec)
- 14. Revoke update permission from the user 'faculty'. mysql> revoke update on student from faculty;

Query OK, 0 rows affected (0.05 sec)

15. Revoke all the permissions from the user 'student'.

mysql> revoke insert on student from student;

Query OK, 0 rows affected (0.01 sec)