

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','2001-09-  
26','F','cse','A',2024,'vitla'), (105,'Poornima','2001-09-  
02','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','2003-08-  
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'), (110,'Manvi','2003-05-  
29','F','cse','A',2025,'Shirlalu');  
Query OK, 5 rows affected (0.04 sec)  
Records: 5 Duplicates: 0 Warnings: 0
```

```
mysql> select * from student;
```

id	name	date_of_birth	gender	branch	section	year	address
101	Larine	2002-10-15	F	cse	A	2024	Beltangady
102	Keerthana	2002-09-29	F	cse	A	2024	ujre
103	Nishmitha	2003-03-09	F	cse	A	2024	darmastala
104	Shamla	2001-09-26	F	cse	A	2024	vitla
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
110	Manvi	2003-05-29	F	cse	A	2025	Shirlalu

10 rows in set (0.00 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.

```
mysql> select * from student;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+
| id | name   | date_of_birth | gender | branch | section | year | address |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 101 | Larine  | 2002-10-15   | F      | cse    | A       | 2024 | Beltangady |
| 102 | Keerthana | 2002-09-29   | F      | cse    | A       | 2024 | ujre      |
| 103 | Nishmitha | 2003-03-09   | F      | cse    | A       | 2024 | darmastala |
| 104 | Shamla  | 2001-09-26   | F      | cse    | A       | 2024 | vitla     |
| 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 |
| 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 | Larine  | 2002-10-15   | F      | cse    | A       | 2024 | Beltangady |
| 102 | Keerthana | 2002-09-29   | F      | cse    | A       | 2024 | ujre      |
| 103 | Nishmitha | 2003-03-09   | F      | cse    | A       | 2024 | darmastala |
| 104 | Shamla  | 2001-09-26   | F      | 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';
```

```
+-----+-----+-----+-----+-----+-----+-----+
| id | name      | date_of_birth | gender | branch | section | year | address |
+-----+-----+-----+-----+-----+-----+-----+
| 101 | Larine    | 2002-10-15   | F      | cse    | A       | 2024 | Beltangady |
| 102 | Keerthana | 2002-09-29   | F      | cse    | A       | 2024 | ujre      |
| 103 | Nishmitha | 2003-03-09   | F      | cse    | A       | 2024 | darmastala |
| 104 | Shamla    | 2001-09-26   | F      | cse    | A       | 2024 | vitla     |
| 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 |
| 110 | Manvi     | 2003-05-29   | F      | cse    | A       | 2025 | Shirlalu  |
+-----+-----+-----+-----+-----+-----+-----+
```

9 rows in set (0.00 sec)

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)