

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,'Darshan','2002-10-15','M','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,'Veeresh','2002-09-29','M','cse','A',2024,'ujre'), (103,'bhuvan','2003-03-09','M','cse','A',2024,'darmastala'), (104,'ramesh','2001-09-26','M','cse','A',2024,'vitla'), (105,'spoorthi','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,'reena','2002-09-04','F','bds','E',2024,'badyar'), (107,'rose','2003-08-09','F','eee','F',2024,'manglore'), (108,'gagan','2001-09-21','M','ece','B',2024,'vitla'), (109,'spoorthi K','2003-09-02','F','cse','A',2025,'darmastala'), (110,'chandana','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	Darshan	2002-10-15	M	cse	A	2024	Beltangady
102	Veeresh	2002-09-29	M	cse	A	2024	ujre
103	bhuvan	2003-03-09	M	cse	A	2024	darmastala
104	ramesh	2001-09-26	M	cse	A	2024	vitla
105	spoorthi	2001-09-02	F	cse	A	2024	darmastala
106	reena	2002-09-04	F	bds	E	2024	badyar
107	rose	2003-08-09	F	eee	F	2024	manglore
108	gagan	2001-09-21	M	ece	B	2024	vitla
109	spoorthi K	2003-09-02	F	cse	A	2025	darmastala
110	chandana	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 | Darshan | 2002-10-15 | M | cse | A | 2024 | Beltangady |
| 102 | Veeresh | 2002-09-29 | M | cse | A | 2024 | ujre |
| 103 | bhuvan | 2003-03-09 | M | cse | A | 2024 | darmastala |
| 104 | ramesh | 2001-09-26 | M | cse | A | 2024 | vitla |
| 105 | spoorthi | 2001-09-02 | F | cse | A | 2024 | darmastala |
| 106 | reena | 2002-09-04 | F | bds | E | 2024 | badyar |
| 107 | rose | 2003-08-09 | F | eee | F | 2024 | manglore |
| 108 | gagan | 2001-09-21 | M | ece | B | 2024 | vitla |
| 109 | spoorthi K | 2003-09-02 | F | cse | A | 2025 | darmastala |
| 110 | chandana | 2003-05-29 | F | cse | A | 2025 | Shirlalu |
+-----+-----+-----+-----+-----+-----+-----+

```

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 | gagan | 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 | Darshan | 2002-10-15 | M | cse | A | 2024 | Beltangady |
| 102 | Veeresh | 2002-09-29 | M | cse | A | 2024 | ujre |
| 103 | bhuvan | 2003-03-09 | M | cse | A | 2024 | darmastala |
| 104 | ramesh | 2001-09-26 | M | cse | A | 2024 | vitla |
| 105 | spoorthi | 2001-09-02 | F | cse | A | 2024 | darmastala |
| 109 | spoorthi K | 2003-09-02 | F | cse | A | 2025 | darmastala |
| 110 | chandana | 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 | spoorthi | 2001-09-02 | F | cse | A | 2024 | darmastala |
| 106 | reena | 2002-09-04 | F | bds | E | 2024 | badyar |
| 107 | rose | 2003-08-09 | F | eee | F | 2024 | manglore |
| 109 | spoorthi K | 2003-09-02 | F | cse | A | 2025 | darmastala |

```

110	chandana	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)