```
mysql> CREATE DATABASE assignment2;
Query OK, 1 row affected (0.05 sec)
```

1. Create the following table with the given data as follows.

```
mysql> CREATE TABLE employe(empid int,acno int,ename varchar(40), sal int,bankname varchar(40),branch varchar(40),yearofjoin int,past
exp int, address varchar(40));
Query OK, 0 rows affected (0.09 sec)
```

```
mysql> insert into employe values(1002,234567,'nayan',28500,'bob','udipi',2021,2,'mangalore'),(1003,345678,'alen',24500,'ubi','bangal
ore',2022,1,'manga');
Query OK, 2 rows affected (0.05 sec)
Records: 2  Duplicates: 0  Warnings: 0
```

2. Write a query to display all the records from the table.

```
mysql> select * from employe;
+-------+--------+-------+-------+----------+-----------+------------+---------+-----------+
| empid | acno   | ename | sal   | bankname | branch    | yearofjoin | pastexp | address   |
+-------+--------+-------+-------+----------+-----------+------------+---------+-----------+
|  1001 | 123456 | pary  | 25000 | sbi      | mangalore |       2020 |       3 | mangalore |
|  1002 | 234567 | nayan | 28500 | bob      | udipi     |       2021 |       2 | mangalore |
|  1003 | 345678 | alen  | 24500 | ubi      | bangalore |       2022 |       1 | manga     |
|  1004 | 456789 | mouni | 36000 | kmb      | ujre      |       2020 |       3 | nitte     |
|  1005 | 654321 | siddu | 32500 | sbi      | mangalore |       2021 |       4 | nitte     |
|  1006 | 765432 | nikam | 25000 | kmb      | mangalore |       2023 |       0 | udipi     |
|  1007 | 876543 | komal | 24000 | icici    | udipi     |       2023 |       2 | udipi     |
|  1008 | 987654 | john  | 31000 | hdfc     | mangalore |       2024 |       1 | ujri      |
|  1009 | 129038 | enry  | 29000 | boi      | udipi     |       2020 |       3 | ujre      |
|  1010 | 123890 | lilli | 28000 | hdfc     | ujre      |       2021 |       2 | nitte     |
|  1011 | 789012 | bhuvi | 29000 | sbi      | mangalore |       2023 |       5 | udipi     |
+-------+--------+-------+-------+----------+-----------+------------+---------+-----------+
11 rows in set (0.04 sec)
```

3.Write a query to display all the records from the table, whose branch and address both are the same.

```
mysql> select * from employe where(branch=address);
+-------+--------+-------+-------+----------+-----------+------------+---------+-----------+
| empid | acno   | ename | sal   | bankname | branch    | yearofjoin | pastexp | address   |
+-------+--------+-------+-------+----------+-----------+------------+---------+-----------+
|  1001 | 123456 | pary  | 25000 | sbi      | mangalore |       2020 |       3 | mangalore |
|  1007 | 876543 | komal | 24000 | icici    | udipi     |       2023 |       2 | udipi     |
+-------+--------+-------+-------+----------+-----------+------------+---------+-----------+
2 rows in set (0.00 sec)
```

4. Write a query to display employee acno, ename, bankname, and branch details whose salary is more than 30000.

```
mysql> select acno,ename,bankname,branch from employe where (sal>30000);
+--------+-------+----------+-----------+
| acno   | ename | bankname | branch    |
+--------+-------+----------+-----------+
| 456789 | mouni | kmb      | ujre      |
| 654321 | siddu | sbi      | mangalore |
| 987654 | john  | hdfc     | mangalore |
+--------+-------+----------+-----------+
3 rows in set (0.00 sec)
```

5. Write a query to display employee records who are earning less than 2500

```
mysql> select * from employe where(sal<25000);
+-------+--------+-------+-------+----------+-----------+-----------+--------+---------+
| empid | acno   | ename | sal   | bankname | branch    | yearofjoin | pastexp | address |
+-------+--------+-------+-------+----------+-----------+-----------+--------+---------+
|  1003 | 345678 | alen  | 24500 | ubi      | bangalore |      2022 |      1 | manga   |
|  1007 | 876543 | komal | 24000 | icici    | udipi     |      2023 |      2 | udipi   |
+-------+--------+-------+-------+----------+-----------+-----------+--------+---------+
2 rows in set (0.00 sec)
```

6. Write a query to display the employee record of who is earning the highest salary.

```
mysql> select * from employe where sal=(select max(sal) from employe)limit 1;
+-------+--------+-------+-------+----------+--------+-----------+--------+---------+
| empid | acno   | ename | sal   | bankname | branch | yearofjoin | pastexp | address |
+-------+--------+-------+-------+----------+--------+-----------+--------+---------+
|  1004 | 456789 | mouni | 36000 | kmb      | ujre   |      2020 |      3 | nitte   |
+-------+--------+-------+-------+----------+--------+-----------+--------+---------+
1 row in set (0.04 sec)
```

7. Write a query to display the employee name who is earning less salary.

```
mysql> select * from employe where sal=(select min(sal) from employe);
+-------+--------+-------+-------+----------+--------+-----------+--------+---------+
| empid | acno   | ename | sal   | bankname | branch | yearofjoin | pastexp | address |
+-------+--------+-------+-------+----------+--------+-----------+--------+---------+
|  1007 | 876543 | komal | 24000 | icici    | udipi  |      2023 |      2 | udipi   |
+-------+--------+-------+-------+----------+--------+-----------+--------+---------+
1 row in set (0.00 sec)
```

8. Write a query to the employee ename, acno, and bankname who are earning in between 25000 and 32000 (both are included).

```
mysql> select ename,acno,bankname from employe where sal>=25000 AND sal<=32000;
+-------+--------+----------+
| ename | acno   | bankname |
+-------+--------+----------+
| pary  | 123456 | sbi      |
| nayan | 234567 | bob      |
| nikam | 765432 | kmb      |
| john  | 987654 | hdfc     |
| enry  | 129038 | boi      |
| lilli | 123890 | hdfc     |
+-------+--------+----------+
6 rows in set (0.00 sec)
```

9. Write a query to display eid, ename, sal, acno who have an account in SBI bank.

```
mysql> select empid,ename,sal from employe where bankname='sbi';
+-------+-------+-------+
| empid | ename | sal   |
+-------+-------+-------+
|  1001 | pary  | 25000 |
|  1005 | siddu | 32500 |
+-------+-------+-------+
2 rows in set (0.00 sec)
```

11. Write a query to display eid, ename, sal, acno who have joined before 2023(2023 is excluded).

```
mysql> select empid,ename,sal,acno from employe where yearofjoin<2023;
+-------+-------+-------+--------+
| empid | ename | sal   | acno   |
+-------+-------+-------+--------+
|  1001 | pary  | 25000 | 123456 |
|  1002 | nayan | 28500 | 234567 |
|  1003 | alen  | 24500 | 345678 |
|  1004 | mouni | 36000 | 456789 |
|  1005 | siddu | 32500 | 654321 |
|  1009 | enry  | 29000 | 129038 |
|  1010 | lilli | 28000 | 123890 |
+-------+-------+-------+--------+
7 rows in set (0.00 sec)
```

10. Write a query to display eid, ename, sal, acno who have an account in ICICI bank and from udipi branch.

```
mysql> select empid,ename,sal from employe where branch='udipi';
+-------+-------+-------+
| empid | ename | sal   |
+-------+-------+-------+
|  1002 | nayan | 28500 |
|  1007 | komal | 24000 |
|  1009 | enry  | 29000 |
+-------+-------+-------+
3 rows in set (0.00 sec)
```

12.Write a query to display eid, ename, sal, acno, bankname and branch who have an account in SBI bank and joined after 2022.

```
mysql> select empid,ename,sal,acno,bankname,branch from employe where bankname='sbi' AND yearofjoin>2022;
+-------+-------+-------+--------+----------+-----------+
| empid | ename | sal   | acno   | bankname | branch    |
+-------+-------+-------+--------+----------+-----------+
|  1011 | bhuvi | 29000 | 789012 | sbi      | mangalore |
+-------+-------+-------+--------+----------+-----------+
1 row in set (0.00 sec)
```

13.Write a query to display eid, ename, sal, acno,address who have joined early from mangalore.

```
mysql> select empid,ename,sal,acno from employe where branch='mangalore';
+-------+-------+-------+--------+
| empid | ename | sal   | acno   |
+-------+-------+-------+--------+
|  1001 | pary  | 25000 | 123456 |
|  1005 | siddu | 32500 | 654321 |
|  1006 | nikam | 25000 | 765432 |
|  1008 | john  | 31000 | 987654 |
|  1011 | bhuvi | 29000 | 789012 |
+-------+-------+-------+--------+
5 rows in set (0.04 sec)
```

15.Write a query to display the number of employees having the same salary and that salary from the table

```
mysql> SELECT sal, COUNT(*) as num_employees FROM employe GROUP BY sal HAVING COUNT(*) > 1;
+-------+---------------+
| sal   | num_employees |
+-------+---------------+
| 25000 |             2 |
| 29000 |             2 |
+-------+---------------+
  rows in set (0.05 sec)
```

Date: 12/04/2024

Assignment

1. Create a database "college".
2. Create a table 'student' with columns (id, name, date of birth, gender, branch, section, year, address) under the "college" database.
3. Insert 10 rows into the table.

```
mysql> create database college12;
Query OK, 1 row affected (0.06 sec)

mysql> create table student(id int,name varchar(20),dob date,gender varchar(20),branch varchar(20),section varchar(20),year int,address varchar(
20));
ERROR 1046 (3D000): No database selected
mysql> use college12;
Database changed
mysql> create table student(id int,name varchar(20),dob date,gender varchar(20),branch varchar(20),section varchar(20),year int,address varchar(
20));
Query OK, 0 rows affected (0.12 sec)

mysql> insert into student values(2,'sham','2024-1-2','f','ec','a',2023,'belgavi'),(3,'pary','2022-1-3','m','cse','b',2023,'mangalore'),(4,'naya
n','2002-2-1','f','mec','e',2024,'udupi'),(5,'alen','2002-3-4','m','civil','b',2022,'udupi'),(6,'mouni','2002-2-1','m','mec','e',2021,'ujre'),(7
,'komal','2001-2-4','f','eee','c',2020,'bengalore'),(8,'john','2002-5-16','m','civil','d',2019,'gokak'),(9,'nikam','2004-9-6','m','cse','a',2023
,'gokarn'),(10,'lilli','2003-6-19','f','eee','c',2022,'belgavi');
Query OK, 9 rows affected (0.06 sec)
Records: 9  Duplicates: 0  Warnings: 0

mysql> select * from student;
+----+-------+------------+--------+--------+---------+------+-----------+
| id | name  | dob        | gender | branch | section | year | address   |
+----+-------+------------+--------+--------+---------+------+-----------+
|  2 | sham  | 2024-01-02 | f      | ec     | a       | 2023 | belgavi   |
|  3 | pary  | 2022-01-03 | m      | cse    | b       | 2023 | mangalore |
|  4 | nayan | 2002-02-01 | f      | mec    | e       | 2024 | udupi     |
|  5 | alen  | 2002-03-04 | m      | civil  | b       | 2022 | udupi     |
|  6 | mouni | 2002-02-01 | m      | mec    | e       | 2021 | ujre      |
|  7 | komal | 2001-02-04 | f      | eee    | c       | 2020 | bengalore |
|  8 | john  | 2002-05-16 | m      | civil  | d       | 2019 | gokak     |
|  9 | nikam | 2004-09-06 | m      | cse    | a       | 2023 | gokarn    |
| 10 | lilli | 2003-06-19 | f      | eee    | c       | 2022 | belgavi   |
+----+-------+------------+--------+--------+---------+------+-----------+
9 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 'admin14'@'localhost' identified by 'admin12345';
Query OK, 0 rows affected (0.06 sec)

mysql>  grant insert,update,delete,alter,create,drop on student to 'admin14'@'localhost';
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> show grants for admin14@localhost;
+-----------------------------------------------------------------------------------------+
| Grants for admin14@localhost                                                            |
+-----------------------------------------------------------------------------------------+
| GRANT USAGE ON *.* TO `admin14`@`localhost`                                             |
| GRANT INSERT, UPDATE, DELETE, CREATE, DROP, ALTER ON `college12`.`student` TO `admin14`@`localhost` |
+-----------------------------------------------------------------------------------------+
2 rows in set (0.04 sec)
```

5.Create user username: 'principal' and password: 'principal@123' with

select, insert, update, and delete permissions.

```
ysql> create user 'principal14'@'localhost' identified by 'princi12345';
uery OK, 0 rows affected (0.06 sec)

ysql>  grant insert,update,delete,create on student to 'pricipal14'@'localhost';
RROR 1410 (42000): You are not allowed to create a user with GRANT
ysql>  grant create on student to 'pricipal14'@'localhost';
RROR 1410 (42000): You are not allowed to create a user with GRANT
ysql> grant insert,update,delete on student to 'principal14'@'localhost';
uery OK, 0 rows affected (0.05 sec)

ysql> grant select on student to 'principal14'@'localhost';
uery OK, 0 rows affected (0.05 sec)
```

```
mysql> show grants for principal14@localhost;
+----------------------------------------------------------------------------------+
| Grants for principal14@localhost                                                 |
+----------------------------------------------------------------------------------+
| GRANT USAGE ON *.* TO `principal14`@`localhost`                                  |
| GRANT SELECT, INSERT, UPDATE, DELETE ON `college12`.`student` TO `principal14`@`localhost` |
+----------------------------------------------------------------------------------+
2 rows in set (0.01 sec)
```

6.Create user username: 'faculty' and password: 'faculty@123' with select, and update permissions.

```
mysql> create user 'faculty14'@'localhost' identified by 'faculty12345';
Query OK, 0 rows affected (0.06 sec)

mysql> grant select,update on student to 'faculty14'@'localhost';
Query OK, 0 rows affected (0.05 sec)
```

```
mysql> show grants for faculty14@localhost;
+-----------------------------------------------------------------------+
| Grants for faculty14@localhost                                        |
+-----------------------------------------------------------------------+
| GRANT USAGE ON *.* TO `faculty14`@`localhost`                         |
| GRANT SELECT, UPDATE ON `college12`.`student` TO `faculty14`@`localhost` |
+-----------------------------------------------------------------------+
2 rows in set (0.04 sec)
```

7.Create user username: 'student' without a password and with select permission only.

```
mysql> create user 'user14'@'localhost' identified by 'user12345';
Query OK, 0 rows affected (0.06 sec)

mysql> grant select on student to 'user14'@'localhost';
Query OK, 0 rows affected (0.05 sec)
```

```
mysql> show grants for user14@localhost;
+---------------------------------------------------------------------+
| Grants for user14@localhost                                         |
+---------------------------------------------------------------------+
| GRANT USAGE ON *.* TO `user14`@`localhost`                          |
| GRANT SELECT ON `college12`.`student` TO `user14`@`localhost`       |
+---------------------------------------------------------------------+
2 rows in set (0.00 sec)
```

1.   Revoke all the permissions from the user 'admin'.

```
mysql> revoke all privileges on * . * from 'admin14'@'localhost';
Query OK, 0 rows affected (0.02 sec)

mysql> revoke insert on student to 'principal14'@'localhost';
ERROR 1064 (42000): You have an error in your SQL syntax; check the
 use near 'to 'principal14'@'localhost'' at line 1
mysql> revoke insert on student to principal14;
ERROR 1064 (42000): You have an error in your SQL syntax; check the
 use near 'to principal14' at line 1
mysql> revoke insert on student from 'principal14'@'localhost';
Query OK, 0 rows affected (0.05 sec)

mysql> revoke update on student from 'faculty14'@'localhost';
Query OK, 0 rows affected (0.05 sec)

mysql> revoke all privileges on * . * from 'user14'@'localhost';
Query OK, 0 rows affected (0.06 sec)
```

```
mysql> show grants for admin14@localhost;
+----------------------------------------------+
| Grants for admin14@localhost                 |
+----------------------------------------------+
| GRANT USAGE ON *.* TO `admin14`@`localhost`  |
+----------------------------------------------+
1 row in set (0.00 sec)
```

2.   Revoke only insert permission from the user 'principal'.

```
mysql> show grants for principal14@localhost;
+---------------------------------------------------------------------------------+
| Grants for principal14@localhost                                                |
+---------------------------------------------------------------------------------+
| GRANT USAGE ON *.* TO `principal14`@`localhost`                                 |
| GRANT SELECT, UPDATE, DELETE ON `college12`.`student` TO `principal14`@`localhost` |
+---------------------------------------------------------------------------------+
2 rows in set (0.00 sec)
```

3.   Revoke update permission from the user 'faculty'.

```
mysql> show grants for faculty14@localhost;
+----------------------------------------------------------------------+
| Grants for faculty14@localhost                                       |
+----------------------------------------------------------------------+
| GRANT USAGE ON *.* TO `faculty14`@`localhost`                        |
| GRANT SELECT ON `college12`.`student` TO `faculty14`@`localhost`     |
+----------------------------------------------------------------------+
2 rows in set (0.00 sec)
```

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

```
mysql> show grants for user14@localhost;
+----------------------------------------------+
| Grants for user14@localhost                  |
+----------------------------------------------+
| GRANT USAGE ON *.* TO `user14`@`localhost`   |
+----------------------------------------------+
row in set (0.00 sec)
```

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

```
C:\Users\DELL>cd C:\Program Files\MySQL\MySQL Server 8.0\bin

C:\Program Files\MySQL\MySQL Server 8.0\bin>mysql -hlocalhost -uadmin14 -padmin12345
mysql: [Warning] Using a password on the command line interface can be insecure.
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 41
Server version: 8.0.36 MySQL Community Server - GPL

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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> insert column phonenumber int;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to y
t syntax to use near 'column phonenumber int' at line 1
mysql> alter table student
    -> add phonenumber int;
ERROR 1046 (3D000): No database selected
mysql> use college14;
ERROR 1044 (42000): Access denied for user 'admin14'@'localhost' to database 'college14'
mysql> use college12;
Database changed
mysql> alter table student
    -> add phnumber int;
Query OK, 0 rows affected (0.10 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> select * from student;
+------+-------+------------+--------+--------+---------+------+-----------+----------+
| id   | name  | dob        | gender | branch | section | year | address   | phnumber |
+------+-------+------------+--------+--------+---------+------+-----------+----------+
|    2 | sham  | 2024-01-02 | f      | ec     | a       | 2023 | belgavi   |     NULL |
|    3 | pary  | 2022-01-03 | m      | cse    | b       | 2023 | mangalore |     NULL |
|    4 | nayan | 2002-02-01 | f      | mec    | e       | 2024 | udupi     |     NULL |
|    5 | alen  | 2002-03-04 | m      | civil  | b       | 2022 | udupi     |     NULL |
|    6 | mouni | 2002-02-01 | m      | mec    | e       | 2021 | ujre      |     NULL |
|    7 | komal | 2001-02-04 | f      | eee    | c       | 2020 | bengalore |     NULL |
|    8 | john  | 2002-05-16 | m      | civil  | d       | 2019 | gokak     |     NULL |
|    9 | nikam | 2004-09-06 | m      | cse    | a       | 2023 | gokarn    |     NULL |
|   10 | lilli | 2003-06-19 | f      | eee    | c       | 2022 | belgavi   |     NULL |
+------+-------+------------+--------+--------+---------+------+-----------+----------+
9 rows in set (0.00 sec)
```

9.Login with the 'principal' user and add 5 more new rows to the table with all column values including phone numbers.

```
C:\Users\DELL>cd C:\Program Files\MySQL\MySQL Server 8.0\bin

C:\Program Files\MySQL\MySQL Server 8.0\bin>mysql -hlocalhost -uprincipal14 -pprinci12345
mysql: [Warning] Using a password on the command line interface can be insecure.
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 42
Server version: 8.0.36 MySQL Community Server - GPL

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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 college12;
Database changed
mysql>  insert into student values(12,'sham','2024-1-2','f','ec','a',2023,'belgavi'),(13,'pary','2022-1-3','m','cse','b'
,2023,'mangalore'),(14,'nayan','2002-2-1','f','mec','e',2024,'udupi'),(15,'alen','2002-3-4','m','civil','b',2022,'udupi'
),(16,'mouni','2002-2-1','m','mec','e',2021,'ujre')
    ->  insert into student values(12,'sham','2024-1-2','f','ec','a',2023,'belgavi'),(13,'pary','2022-1-3','m','cse','b',2023,'mangalore'),(14,'
nayan','2002-2-1','f','mec','e',2024,'udupi'),(15,'alen','2002-3-4','m','civil','b',2022,'udupi'),(16,'mouni','2002-2-1','m','mec','e',2021,'ujr
e');
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to
use near 'insert into student values(12,'sham','2024-1-2','f','ec','a',2023,'belgavi'),(13' at line 2
mysql>  insert into student values(12,'sham','2024-1-2','f','ec','a',2023,'belgavi'),(13,'pary','2022-1-3','m','cse','b',2023,'mangalore'),(14,'
nayan','2002-2-1','f','mec','e',2024,'udupi'),(15,'alen','2002-3-4','m','civil','b',2022,'udupi'),(16,'mouni','2002-2-1','m','mec','e',2021,'ujr
e');
ERROR 1136 (21S01): Column count doesn't match value count at row 1
mysql>  insert into student values(12,'sham','2024-1-2','f','ec','a',2023,'belgavi',67895),(13,'pary','2022-1-3','m','cse','b',2023,'mangalore',
45678),(14,'nayan','2002-2-1','f','mec','e',2024,'udupi',34567),(15,'alen','2002-3-4','m','civil','b',2022,'udupi',23456),(16,'mouni','2002-2-1'
,'m','mec','e',2021,'ujre',12345);
Query OK, 5 rows affected (0.05 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

```
mysql> select * from student;
+------+-------+------------+--------+--------+---------+------+-----------+----------+
| id   | name  | dob        | gender | branch | section | year | address   | phnumber |
+------+-------+------------+--------+--------+---------+------+-----------+----------+
|    2 | sham  | 2024-01-02 | f      | ec     | a       | 2023 | belgavi   |     NULL |
|    3 | pary  | 2022-01-03 | m      | cse    | b       | 2023 | mangalore |     NULL |
|    4 | nayan | 2002-02-01 | f      | mec    | e       | 2024 | udupi     |     NULL |
|    5 | alen  | 2002-03-04 | m      | civil  | b       | 2022 | udupi     |     NULL |
|    6 | mouni | 2002-02-01 | m      | mec    | e       | 2021 | ujre      |     NULL |
|    7 | komal | 2001-02-04 | f      | eee    | c       | 2020 | bengalore |     NULL |
|    8 | john  | 2002-05-16 | m      | civil  | d       | 2019 | gokak     |     NULL |
|    9 | nikam | 2004-09-06 | m      | cse    | a       | 2023 | gokarn    |     NULL |
|   10 | lilli | 2003-06-19 | f      | eee    | c       | 2022 | belgavi   |     NULL |
|   12 | sham  | 2024-01-02 | f      | ec     | a       | 2023 | belgavi   |    67895 |
|   13 | pary  | 2022-01-03 | m      | cse    | b       | 2023 | mangalore |    45678 |
|   14 | nayan | 2002-02-01 | f      | mec    | e       | 2024 | udupi     |    34567 |
|   15 | alen  | 2002-03-04 | m      | civil  | b       | 2022 | udupi     |    23456 |
|   16 | mouni | 2002-02-01 | m      | mec    | e       | 2021 | ujre      |    12345 |
+------+-------+------------+--------+--------+---------+------+-----------+----------+
```

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

```
Microsoft Windows [Version 10.0.22631.3447]
(c) Microsoft Corporation. All rights reserved.

C:\Users\DELL>cd C:\Program Files\MySQL\MySQL Server 8.0\bin

C:\Program Files\MySQL\MySQL Server 8.0\bin>mysql -hlocalhost -ufaculty14 -pfaculty12345
mysql: [Warning] Using a password on the command line interface can be insecure.
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 43
Server version: 8.0.36 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use college12;
Database changed
mysql> update student set phnumber=45362,23412;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '23412' at line
1
mysql> update student set phnumber=45362;
Query OK, 14 rows affected (0.05 sec)
Rows matched: 14  Changed: 14  Warnings: 0

mysql> update student set phnumber=45382;
Query OK, 14 rows affected (0.05 sec)
Rows matched: 14  Changed: 14  Warnings: 0

mysql> update student set phnumber=43215 where id=2;
Query OK, 1 row affected (0.05 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> update student set phnumber=87215 where id=3;
Query OK, 1 row affected (0.05 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> update student set phnumber=347215 where id=4;
Query OK, 1 row affected (0.05 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select * from student;
+------+-------+------------+--------+--------+---------+------+-----------+----------+
| id   | name  | dob        | gender | branch | section | year | address   | phnumber |
+------+-------+------------+--------+--------+---------+------+-----------+----------+
|    2 | sham  | 2024-01-02 | f      | ec     | a       | 2023 | belgavi   |    43215 |
|    3 | pary  | 2022-01-03 | m      | cse    | b       | 2023 | mangalore |    87215 |
|    4 | nayan | 2002-02-01 | f      | mec    | e       | 2024 | udupi     |   347215 |
|    5 | alen  | 2002-03-04 | m      | civil  | b       | 2022 | udupi     |  8436515 |
|    6 | mouni | 2002-02-01 | m      | mec    | e       | 2021 | ujre      |   123515 |
|    7 | komal | 2001-02-04 | f      | eee    | c       | 2020 | bengalore |    67543 |
|    8 | john  | 2002-05-16 | m      | civil  | d       | 2019 | gokak     |    90432 |
|    9 | nikam | 2004-09-06 | m      | cse    | a       | 2023 | gokarn    |    54322 |
|   10 | lilli | 2003-06-19 | f      | eee    | c       | 2022 | belgavi   |    75432 |
|   12 | sham  | 2024-01-02 | f      | ec     | a       | 2023 | belgavi   |    78643 |
|   13 | pary  | 2022-01-03 | m      | cse    | b       | 2023 | mangalore |   198765 |
|   14 | nayan | 2002-02-01 | f      | mec    | e       | 2024 | udupi     |  8765435 |
|   15 | alen  | 2002-03-04 | m      | civil  | b       | 2022 | udupi     |    45382 |
|   16 | mouni | 2002-02-01 | m      | mec    | e       | 2021 | ujre      |    45382 |
+------+-------+------------+--------+--------+---------+------+-----------+----------+
14 rows in set (0.00 sec)
```

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

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

c. Display students from any one branch

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

e. Display girl students from the table.

```
mysql> select * from student where gender='m';
+------+-------+------------+--------+--------+---------+------+-----------+----------+
| id   | name  | dob        | gender | branch | section | year | address   | phnumber |
+------+-------+------------+--------+--------+---------+------+-----------+----------+
|    3 | pary  | 2022-01-03 | m      | cse    | b       | 2023 | mangalore |    87215 |
|    5 | alen  | 2002-03-04 | m      | civil  | b       | 2022 | udupi     |  8436515 |
|    6 | mouni | 2002-02-01 | m      | mec    | e       | 2021 | ujre      |   123515 |
|    8 | john  | 2002-05-16 | m      | civil  | d       | 2019 | gokak     |    90432 |
|    9 | nikam | 2004-09-06 | m      | cse    | a       | 2023 | gokarn    |    54322 |
|   13 | pary  | 2022-01-03 | m      | cse    | b       | 2023 | mangalore |   198765 |
|   15 | alen  | 2002-03-04 | m      | civil  | b       | 2022 | udupi     |    45382 |
|   16 | mouni | 2002-02-01 | m      | mec    | e       | 2021 | ujre      |    45382 |
+------+-------+------------+--------+--------+---------+------+-----------+----------+
8 rows in set (0.00 sec)

mysql> select * from student where gender='f';
+------+-------+------------+--------+--------+---------+------+-----------+----------+
| id   | name  | dob        | gender | branch | section | year | address   | phnumber |
+------+-------+------------+--------+--------+---------+------+-----------+----------+
|    2 | sham  | 2024-01-02 | f      | ec     | a       | 2023 | belgavi   |    43215 |
|    4 | nayan | 2002-02-01 | f      | mec    | e       | 2024 | udupi     |   347215 |
|    7 | komal | 2001-02-04 | f      | eee    | c       | 2020 | bengalore |    67543 |
|   10 | lilli | 2003-06-19 | f      | eee    | c       | 2022 | belgavi   |    75432 |
|   12 | sham  | 2024-01-02 | f      | ec     | a       | 2023 | belgavi   |    78643 |
|   14 | nayan | 2002-02-01 | f      | mec    | e       | 2024 | udupi     |  8765435 |
+------+-------+------------+--------+--------+---------+------+-----------+----------+
6 rows in set (0.00 sec)
```

Date: 15/04/2024

Task

1. Create a table Customer with columns cid and cname. cid should be a primary key in the table and cname should be NOT NULL.

```
mysql> create table customer(cid int PRIMARY KEY,cname varchar(2
0) NOT NULL);
Query OK, 0 rows affected (0.17 sec)

mysql> desc customer;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| cid    | int         | NO   | PRI | NULL    |       |
| cname  | varchar(20) | NO   |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
2 rows in set (0.05 sec)
```

2. Insert three customer data into the table.

```
mysql> insert into customer values(2,'ram'),(3,'sita'),(4,'raksh
');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> select * from customer;
+-----+-------+
| cid | cname |
+-----+-------+
|   2 | ram   |
|   3 | sita  |
|   4 | raksh |
+-----+-------+
3 rows in set (0.00 sec)
```

3. Add columns age, city and phnum. Age > 20, city default value should be 'Bangalore' and phnum should be unique.

```
mysql> alter table customer add column age int check(age>20),add
 column city varchar(20) default 'bengalore',add column phnum in
t uni
que;
Query OK, 3 rows affected (0.18 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> desc customer;
+--------+-------------+------+-----+-----------+-------+
| Field  | Type        | Null | Key | Default   | Extra |
+--------+-------------+------+-----+-----------+-------+
| cid    | int         | NO   | PRI | NULL      |       |
| cname  | varchar(20) | NO   |     | NULL      |       |
| age    | int         | YES  |     | NULL      |       |
| city   | varchar(20) | YES  |     | bengalore |       |
| phnum  | int         | YES  | UNI | NULL      |       |
+--------+-------------+------+-----+-----------+-------+
5 rows in set (0.01 sec)
```

4. Turn on the transaction on.

```
mysql> start transaction;
Query OK, 0 rows affected (0.01 sec)
```

5. Insert another two customer data into the table without city value.

```
mysql> INSERT INTO Customer (cid, cname, age, phnum) VALUES
    -> (5, 'Emily Johnson', 28, '987654'),
    -> (6, 'Mark Smith', 22, '1234567');
Query OK, 2 rows affected (0.04 sec)
Records: 2  Duplicates: 0  Warnings: 0
```

6. Display data from the table.

```
mysql> INSERT INTO Customer (cid, cname, age, phnum) VALUES
    -> (5, 'Emily Johnson', 28, '987654'),
    -> (6, 'Mark Smith', 22, '1234567');
Query OK, 2 rows affected (0.04 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql> select * from customer;
+-----+---------------+------+-----------+----------+
| cid | cname         | age  | city      | phnum    |
+-----+---------------+------+-----------+----------+
|  2  | ram           |  80  | bengalore |    NULL  |
|  3  | sita          |  80  | bengalore |    NULL  |
|  4  | raksh         |  80  | bengalore |    NULL  |
|  5  | Emily Johnson |  28  | bengalore |  987654  |
|  6  | Mark Smith    |  22  | bengalore | 1234567  |
+-----+---------------+------+-----------+----------+
5 rows in set (0.00 sec)
```

7. Create a savepoint 'ins'.

```
mysql> savepoint ins;
Query OK, 0 rows affected (0.00 sec)
```

8. Update the first age of all the customers.

```
mysql> update customer set age=80 where cid<=4;
Query OK, 0 rows affected (0.04 sec)
Rows matched: 3  Changed: 0  Warnings: 0
```

9. Display data from the table.

```
mysql> select * from customer;
+-----+---------------+------+-----------+----------+
| cid | cname         | age  | city      | phnum    |
+-----+---------------+------+-----------+----------+
|  2  | ram           |  80  | bengalore |    NULL  |
|  3  | sita          |  80  | bengalore |    NULL  |
|  4  | raksh         |  80  | bengalore |    NULL  |
|  5  | Emily Johnson |  28  | bengalore |  987654  |
|  6  | Mark Smith    |  22  | bengalore | 1234567  |
+-----+---------------+------+-----------+----------+
5 rows in set (0.00 sec)
```

10.   Create savepoint 'up1';

```
mysql> savepoint up1;
Query OK, 0 rows affected (0.00 sec)
```

11.   Update all the customer's city of the first three customers.

```
mysql> update customer set city='goa' where cid<=4;
Query OK, 3 rows affected (0.00 sec)
Rows matched: 3  Changed: 3  Warnings: 0
```

12.   Display data from the table.

```
mysql> select * from customer;
+-----+----------------+------+-----------+---------+
| cid | cname          | age  | city      | phnum   |
+-----+----------------+------+-----------+---------+
|   2 | ram            |   80 | goa       |    NULL |
|   3 | sita           |   80 | goa       |    NULL |
|   4 | raksh          |   80 | goa       |    NULL |
|   5 | Emily Johnson  |   28 | bengalore |  987654 |
|   6 | Mark Smith     |   22 | bengalore | 1234567 |
+-----+----------------+------+-----------+---------+
5 rows in set (0.00 sec)
```

13. Create savepoint 'up2'.

```
mysql> savepoint up2;
Query OK, 0 rows affected (0.00 sec)
```

14. Roll back to up1.

```
mysql> rollback to up1;
Query OK, 0 rows affected (0.04 sec)
```

15. Display data from the table.

```
mysql> select * from customer;
+-----+----------------+------+-----------+---------+
| cid | cname          | age  | city      | phnum   |
+-----+----------------+------+-----------+---------+
|   2 | ram            |   80 | bengalore |    NULL |
|   3 | sita           |   80 | bengalore |    NULL |
|   4 | raksh          |   80 | bengalore |    NULL |
|   5 | Emily Johnson  |   28 | bengalore |  987654 |
|   6 | Mark Smith     |   22 | bengalore | 1234567 |
+-----+----------------+------+-----------+---------+
rows in set (0.00 sec)
```

16. Commit.

```
mysql> commit;
Query OK, 0 rows affected (0.05 sec)
```

17. Display data from the table.

```
mysql> select * from customer;
+-----+----------------+------+-----------+---------+
| cid | cname          | age  | city      | phnum   |
+-----+----------------+------+-----------+---------+
|   2 | ram            |   80 | bengalore |    NULL |
|   3 | sita           |   80 | bengalore |    NULL |
|   4 | raksh          |   80 | bengalore |    NULL |
|   5 | Emily Johnson  |   28 | bengalore |  987654 |
|   6 | Mark Smith     |   22 | bengalore | 1234567 |
+-----+----------------+------+-----------+---------+
rows in set (0.00 sec)
```