

1.

```
mysql> create database dbCA2;
Query OK, 1 row affected (0.02 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| cis11051 |
| dbca2    |
| employee |
| ictdepartment |
| information_schema |
| lab10_part1 |
| lab8     |
| lab9     |
| mysql    |
| performance_schema |
| sakila   |
| sys      |
| vaccinatedstudent |
+-----+
```

```
mysql> create table student^C
mysql> use dbca2
Database changed
mysql> create table students(student_id int,name varchar(20),age int,city varchar(40),marks int);
Query OK, 0 rows affected (0.05 sec)

mysql> desc studetns;
ERROR 1146 (42S02): Table 'dbca2.studetns' doesn't exist
mysql> desc students
-> ;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| student_id | int | YES | | NULL | |
| name | varchar(20) | YES | | NULL | |
| age | int | YES | | NULL | |
| city | varchar(40) | YES | | NULL | |
| marks | int | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.01 sec)
```

```
MySQL 8.0 Command Line Client
mysql>
mysql> clear
mysql>
mysql>
mysql> insert into students values(1,'Amal',19,'Kandy',45);
Query OK, 1 row affected (0.04 sec)

mysql> select * from students;
+-----+-----+-----+-----+-----+
| student_id | name | age | city | marks |
+-----+-----+-----+-----+-----+
| 1 | Amal | 19 | Kandy | 45 |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> insert into students values(2,'Nimal',20,'Colombo',75),(3,'Kamal',21,'Galle',55),(4,'Sunil',18,'Kandy',45),(5,'Ruwan',19,'Colombo',90),(6,'Amali',20,'Matara',55),
(7,'Saman',22,'Colombo',75);
ERROR 1054 (42S22): Unknown column 'Colombo' in 'field list'
mysql> insert into students values(2,'Nimal',20,'Colombo',75),(3,'Kamal',21,'Galle',55),(4,'Sunil',18,'Kandy',45),(5,'Ruwan',19,'Colombo',90),(6,'Amali',20,'Matara',55),
(7,'Saman',22,'Colombo',75);
Query OK, 6 rows affected (0.02 sec)
Records: 6 Duplicates: 0 Warnings: 0

mysql> select * from students;
+-----+-----+-----+-----+-----+
| student_id | name | age | city | marks |
+-----+-----+-----+-----+-----+
| 1 | Amal | 19 | Kandy | 45 |
| 2 | Nimal | 20 | Colombo | 75 |
| 3 | Kamal | 21 | Galle | 55 |
| 4 | Sunil | 18 | Kandy | 45 |
| 5 | Ruwan | 19 | Colombo | 90 |
| 6 | Amali | 20 | Matara | 55 |
| 7 | Saman | 22 | Colombo | 75 |
+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)

mysql>
```

```
MySQL 8.0 Command Line Client
+-----+
| 3 | Kamal | 21 | Galle | 55 |
| 4 | Sunil | 18 | Kandy | 45 |
| 5 | Ruwan | 19 | Colombo | 90 |
| 6 | Amali | 20 | Matara | 55 |
| 7 | Saman | 22 | Colombo | 75 |
+-----+
7 rows in set (0.00 sec)

mysql> alter table students add column email varchar(100) first;
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> select * from students;
+-----+
| email | student_id | name | age | city | marks |
+-----+
| NULL | 1 | Amal | 19 | Kandy | 45 |
| NULL | 2 | Nimal | 20 | Colombo | 75 |
| NULL | 3 | Kamal | 21 | Galle | 55 |
| NULL | 4 | Sunil | 18 | Kandy | 45 |
| NULL | 5 | Ruwan | 19 | Colombo | 90 |
| NULL | 6 | Amali | 20 | Matara | 55 |
| NULL | 7 | Saman | 22 | Colombo | 75 |
+-----+
7 rows in set (0.00 sec)

mysql> _
```

2.

```
mysql> alter table students alter column email set default "unknown";
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

3.

4.

```
mysql> insert into students(student_id,name,age,city,marks) values(8,'sunil',18,'kandy',45);
Query OK, 1 row affected (0.02 sec)

mysql> select * from students;
+-----+
| email | student_id | name | age | city | marks |
+-----+
| NULL | 1 | Amal | 19 | Kandy | 45 |
| NULL | 2 | Nimal | 20 | Colombo | 75 |
| NULL | 3 | Kamal | 21 | Galle | 55 |
| NULL | 4 | Sunil | 18 | Kandy | 45 |
| NULL | 5 | Ruwan | 19 | Colombo | 90 |
| NULL | 6 | Amali | 20 | Matara | 55 |
| NULL | 7 | Saman | 22 | Colombo | 75 |
| unknown | 8 | sunil | 18 | kandy | 45 |
+-----+
8 rows in set (0.00 sec)
```

5.

```
mysql> update students set age = 23 where student_id=8;
Query OK, 1 row affected (0.02 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from students;
+-----+-----+-----+-----+-----+-----+
| email | student_id | name | age | city | marks |
+-----+-----+-----+-----+-----+-----+
| NULL | 1 | Amal | 19 | Kandy | 45 |
| NULL | 2 | Nimal | 20 | Colombo | 75 |
| NULL | 3 | Kamal | 21 | Galle | 55 |
| NULL | 4 | Sunil | 18 | Kandy | 45 |
| NULL | 5 | Ruwan | 19 | Colombo | 90 |
| NULL | 6 | Amali | 20 | Matara | 55 |
| NULL | 7 | Saman | 22 | Colombo | 75 |
| unknown | 8 | sunil | 23 | kandy | 45 |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

6.

```
mysql> update students set city='Gampha', marks=94 where student_id = 5;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from students;
+-----+-----+-----+-----+-----+-----+
| email | student_id | name | age | city | marks |
+-----+-----+-----+-----+-----+-----+
| NULL | 1 | Amal | 19 | Kandy | 45 |
| NULL | 2 | Nimal | 20 | Colombo | 75 |
| NULL | 3 | Kamal | 21 | Galle | 55 |
| NULL | 4 | Sunil | 18 | Kandy | 45 |
| NULL | 5 | Ruwan | 19 | Gampha | 94 |
| NULL | 6 | Amali | 20 | Matara | 55 |
| NULL | 7 | Saman | 22 | Colombo | 75 |
| unknown | 8 | sunil | 23 | kandy | 45 |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

7.

```
mysql> select distinct name,city from students;
+-----+-----+
| name | city |
+-----+-----+
| Amal | Kandy |
| Nimal | Colombo |
| Kamal | Galle |
| Sunil | Kandy |
| Ruwan | Gampha |
| Amali | Matara |
| Saman | Colombo |
+-----+-----+
7 rows in set (0.01 sec)
```

8.

```
mysql> update students set marks = marks + 5 where marks < 50;
Query OK, 3 rows affected (0.02 sec)
Rows matched: 3  Changed: 3  Warnings: 0
```

```
mysql> select * from students;
+-----+-----+-----+-----+-----+-----+
| email | student_id | name | age | city | marks |
+-----+-----+-----+-----+-----+-----+
| NULL | 1 | Amal | 19 | Kandy | 50 |
| NULL | 2 | Nimal | 20 | Colombo | 75 |
| NULL | 3 | Kamal | 21 | Galle | 55 |
| NULL | 4 | Sunil | 18 | Kandy | 50 |
| NULL | 5 | Ruwan | 19 | Gampha | 94 |
| NULL | 6 | Amali | 20 | Matara | 55 |
| NULL | 7 | Saman | 22 | Colombo | 75 |
| unknown | 8 | sunil | 23 | kandy | 50 |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

9.

```
mysql> select * from students where name like 'S%';
+-----+-----+-----+-----+-----+-----+
| email | student_id | name | age | city | marks |
+-----+-----+-----+-----+-----+-----+
| NULL | 4 | Sunil | 18 | Kandy | 50 |
| NULL | 7 | Saman | 22 | Colombo | 75 |
| unknown | 8 | sunil | 23 | kandy | 50 |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

10.

```
mysql> select * from students where name like '_a%';
+-----+-----+-----+-----+-----+-----+
| email | student_id | name | age | city | marks |
+-----+-----+-----+-----+-----+-----+
| NULL | 3 | Kamal | 21 | Galle | 55 |
| NULL | 7 | Saman | 22 | Colombo | 75 |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

11.

```
mysql> select * from students where 50<marks and marks <80 and city='colombo';
+-----+-----+-----+-----+-----+-----+
| email | student_id | name | age | city | marks |
+-----+-----+-----+-----+-----+-----+
| NULL | 2 | Nimal | 20 | Colombo | 75 |
| NULL | 7 | Saman | 22 | Colombo | 75 |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

12.

```
mysql> delete from students where student_id = 1;
Query OK, 1 row affected (0.02 sec)

mysql> delete from students where student_id = 1;^C
mysql> select * from students;
+-----+-----+-----+-----+-----+-----+
| email | student_id | name | age | city | marks |
+-----+-----+-----+-----+-----+-----+
| NULL | 2 | Nimal | 20 | Colombo | 75 |
| NULL | 3 | Kamal | 21 | Galle | 55 |
| NULL | 4 | Sunil | 18 | Kandy | 50 |
| NULL | 5 | Ruwan | 19 | Gampha | 94 |
| NULL | 6 | Amali | 20 | Matara | 55 |
| NULL | 7 | Saman | 22 | Colombo | 75 |
| unknown | 8 | sunil | 23 | kandy | 50 |
+-----+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```