

Microsoft Windows [Version 10.0.19045.2965]
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```
C:\Users\91934>mysql -u root -p
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 28
Server version: 8.0.33 MySQL Community Server - GPL
```

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

```
mysql> use imad;
Database changed
mysql> create table details;
ERROR 4028 (HY000): A table must have at least one visible column.
mysql> create table details(int id,int rollnumber,section varchar(50),int age,gender
varchar(50),specialisation varchar(50));
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 'int id,int rollnumber,section
varchar(50),int age,gender varchar(50),specialisat' at line 1
mysql> CREATE TABLE details (
-> id INT,
-> rollnumber INT,
-> section VARCHAR(50),
-> age INT,
-> gender VARCHAR(50),
-> specialisation VARCHAR(50)
-> );
Query OK, 0 rows affected (0.04 sec)
```

```
mysql>
mysql> select * from details;
Empty set (0.00 sec)
```

```
mysql> insert into details(id,rollnumber,section,age,gender,specialisation) values (01,570,cse
a,25,male,software engineer);
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 'a,25,male,software engineer)' at line 1
mysql> insert into details(id,rollnumber,section,age,gender,specialisation) values
(01,570,'CSE',25,'male','software engineer');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from details;
+-----+-----+-----+-----+-----+-----+
| id | rollnumber | section | age | gender | specialisation |
+-----+-----+-----+-----+-----+-----+
| 1 | 570 | CSE | 25 | male | software engineer |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> insert into details(id,rollnumber,section,age,gender,specialisation) values
(02,571,'CSE',28,'male','Machine Learning engineer');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation |
|----|------------|---------|-----|--------|---------------------------|
| 1 | 570 | CSE | 25 | male | software engineer |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer |

2 rows in set (0.00 sec)

```
mysql> insert into details(id,rollnumber,section,age,gender,specialisation) values
(03,572,'CSE',28,'male','Chief executive officer');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation |
|----|------------|---------|-----|--------|---------------------------|
| 1 | 570 | CSE | 25 | male | software engineer |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer |
| 3 | 572 | CSE | 28 | male | Chief executive officer |

3 rows in set (0.00 sec)

```
mysql> alter table details
```

```
-> add name varchar(50);
```

```
Query OK, 0 rows affected (0.02 sec)
```

```
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name |
|----|------------|---------|-----|--------|---------------------------|------|
| 1 | 570 | CSE | 25 | male | software engineer | NULL |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer | NULL |
| 3 | 572 | CSE | 28 | male | Chief executive officer | NULL |

3 rows in set (0.00 sec)

```
mysql> ALTER TABLE details
```

```
-> ADD email VARCHAR(100);
```

```
Query OK, 0 rows affected (0.01 sec)
```

```
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> insert into details(id,name,rollnumber,section,age,gender,specialisation) values
(01,'imaduddin',570,'CSE',25,'male','software engineer');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|---------------------------|------|-------|
| 1 | 570 | CSE | 25 | male | software engineer | NULL | NULL |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer | NULL | NULL |

| | | | | | | | |
|---|-----|-----|----|------|-------------------------|-----------|------|
| 3 | 572 | CSE | 28 | male | Chief executive officer | NULL | NULL |
| 1 | 570 | CSE | 25 | male | software engineer | imaduddin | NULL |

4 rows in set (0.00 sec)

```
mysql> insert into details(id,name,rollnumber,section,age,gender,specialisation) values
(01,'raheem',571,'CSE',25,'male','software engineer');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|---------------------------|-----------|-------|
| 1 | 570 | CSE | 25 | male | software engineer | NULL | NULL |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer | NULL | NULL |
| 3 | 572 | CSE | 28 | male | Chief executive officer | NULL | NULL |
| 1 | 570 | CSE | 25 | male | software engineer | imaduddin | NULL |
| 1 | 571 | CSE | 25 | male | software engineer | raheem | NULL |

5 rows in set (0.00 sec)

```
mysql> insert into details(id,name,rollnumber,section,age,gender,specialisation) values
(03,'Akbar',572,'CSE',25,'male','Data Scientist');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into details
-> (id,name,rollnumber,section,age,gender,specialisation) values
(02,'wajahat',571,'CSE',25,'male','Data Analytics');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|---------------------------|-----------|-------|
| 1 | 570 | CSE | 25 | male | software engineer | NULL | NULL |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer | NULL | NULL |
| 3 | 572 | CSE | 28 | male | Chief executive officer | NULL | NULL |
| 1 | 570 | CSE | 25 | male | software engineer | imaduddin | NULL |
| 1 | 571 | CSE | 25 | male | software engineer | raheem | NULL |
| 3 | 572 | CSE | 25 | male | Data Scientist | Akbar | NULL |
| 2 | 571 | CSE | 25 | male | Data Analytics | wajahat | NULL |

7 rows in set (0.00 sec)

```
mysql> insert into details
-> (id,name,rollnumber,section,age,gender,specialisation)
-> values(01,'sharukh',570,'IT',23,'male','full stack developer');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|---------------------------|-----------|-------|
| 1 | 570 | CSE | 25 | male | software engineer | NULL | NULL |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer | NULL | NULL |
| 3 | 572 | CSE | 28 | male | Chief executive officer | NULL | NULL |
| 1 | 570 | CSE | 25 | male | software engineer | imaduddin | NULL |

| | | | | | | | |
|---|-----|-----|----|------|----------------------|---------|------|
| 1 | 571 | CSE | 25 | male | software engineer | raheem | NULL |
| 3 | 572 | CSE | 25 | male | Data Scientist | Akbar | NULL |
| 2 | 571 | CSE | 25 | male | Data Analytics | wajahat | NULL |
| 1 | 570 | IT | 23 | male | full stack developer | sharukh | NULL |

8 rows in set (0.00 sec)

```
mysql> INSERT INTO details (id, rollnumber, section, age, gender, specialisation,name,email)
-> values;
```

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 " at line 2

```
mysql> INSERT INTO details (name) values ('osama');
```

Query OK, 1 row affected (0.00 sec)

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|------|------------|---------|------|--------|---------------------------|-----------|-------|
| 1 | 570 | CSE | 25 | male | software engineer | NULL | NULL |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer | NULL | NULL |
| 3 | 572 | CSE | 28 | male | Chief executive officer | NULL | NULL |
| 1 | 570 | CSE | 25 | male | software engineer | imaduddin | NULL |
| 1 | 571 | CSE | 25 | male | software engineer | raheem | NULL |
| 3 | 572 | CSE | 25 | male | Data Scientist | Akbar | NULL |
| 2 | 571 | CSE | 25 | male | Data Analytics | wajahat | NULL |
| 1 | 570 | IT | 23 | male | full stack developer | sharukh | NULL |
| NULL | NULL | NULL | NULL | NULL | NULL | osama | NULL |

9 rows in set (0.00 sec)

```
mysql> UPDATE details
```

```
-> SET name = 'John Doe'
```

```
-> WHERE id = 1;
```

Query OK, 4 rows affected (0.11 sec)

Rows matched: 4 Changed: 4 Warnings: 0

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|------|------------|---------|------|--------|---------------------------|----------|-------|
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | NULL |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer | NULL | NULL |
| 3 | 572 | CSE | 28 | male | Chief executive officer | NULL | NULL |
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | NULL |
| 1 | 571 | CSE | 25 | male | software engineer | John Doe | NULL |
| 3 | 572 | CSE | 25 | male | Data Scientist | Akbar | NULL |
| 2 | 571 | CSE | 25 | male | Data Analytics | wajahat | NULL |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | NULL |
| NULL | NULL | NULL | NULL | NULL | NULL | osama | NULL |

9 rows in set (0.00 sec)

```
mysql> update details
```

```
-> set name='roman reigns'
```

```
-> where id=2;
```

Query OK, 2 rows affected (0.00 sec)

Rows matched: 2 Changed: 2 Warnings: 0

```
mysql> update details
-> set name='sunil pichai'
-> where id=3;
Query OK, 2 rows affected (0.00 sec)
Rows matched: 2 Changed: 2 Warnings: 0
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|------|------------|---------|------|--------|---------------------------|--------------|-------|
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | NULL |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer | roman reigns | NULL |
| 3 | 572 | CSE | 28 | male | Chief executive officer | sunil pichai | NULL |
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | NULL |
| 1 | 571 | CSE | 25 | male | software engineer | John Doe | NULL |
| 3 | 572 | CSE | 25 | male | Data Scientist | sunil pichai | NULL |
| 2 | 571 | CSE | 25 | male | Data Analytics | roman reigns | NULL |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | NULL |
| NULL | NULL | NULL | NULL | NULL | NULL | osama | NULL |

```
9 rows in set (0.00 sec)
```

```
mysql> update details
-> set email='john@gmail.com'
-> where id=1;
Query OK, 4 rows affected (0.00 sec)
Rows matched: 4 Changed: 4 Warnings: 0
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|------|------------|---------|------|--------|---------------------------|--------------|----------------|
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer | roman reigns | NULL |
| 3 | 572 | CSE | 28 | male | Chief executive officer | sunil pichai | NULL |
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 1 | 571 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 3 | 572 | CSE | 25 | male | Data Scientist | sunil pichai | NULL |
| 2 | 571 | CSE | 25 | male | Data Analytics | roman reigns | NULL |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| NULL | NULL | NULL | NULL | NULL | NULL | osama | NULL |

```
9 rows in set (0.00 sec)
```

```
mysql> update details
-> set email='roman@gmail.com'
-> set email='sunil pichai.com'
-> where id=2
-> where id=3;
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 'set email='sunil pichai.com' where id=2 where id=3' at line 3
mysql> update details
-> set email='roman@gmail.com'
-> where id=2;
```

Query OK, 2 rows affected (0.01 sec)
Rows matched: 2 Changed: 2 Warnings: 0

mysql> select * from details;

| id | rollnumber | section | age | gender | specialisation | name | email |
|------|------------|---------|------|--------|---------------------------|--------------|-----------------|
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer | roman reigns | roman@gmail.com |
| 3 | 572 | CSE | 28 | male | Chief executive officer | sunil pichai | NULL |
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 1 | 571 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 3 | 572 | CSE | 25 | male | Data Scientist | sunil pichai | NULL |
| 2 | 571 | CSE | 25 | male | Data Analytics | roman reigns | roman@gmail.com |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| NULL | NULL | NULL | NULL | NULL | NULL | osama | NULL |

9 rows in set (0.00 sec)

mysql> update details

-> set email='sunil pichai@gmail.com'

-> where id=3;

Query OK, 2 rows affected (0.00 sec)

Rows matched: 2 Changed: 2 Warnings: 0

mysql> select * from details;

| id | rollnumber | section | age | gender | specialisation | name | email |
|------|------------|---------|------|--------|---------------------------|--------------|------------------------|
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer | roman reigns | roman@gmail.com |
| 3 | 572 | CSE | 28 | male | Chief executive officer | sunil pichai | sunil pichai@gmail.com |
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 1 | 571 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 3 | 572 | CSE | 25 | male | Data Scientist | sunil pichai | sunil pichai@gmail.com |
| 2 | 571 | CSE | 25 | male | Data Analytics | roman reigns | roman@gmail.com |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| NULL | NULL | NULL | NULL | NULL | NULL | osama | NULL |

9 rows in set (0.00 sec)

mysql> update details

-> set id=7

-> where name='osama';

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select * from details;

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|---------------------------|--------------|-----------------|
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer | roman reigns | roman@gmail.com |

| | | | | | | | |
|---|------|------|------|------|-------------------------|--------------|------------------------|
| 3 | 572 | CSE | 28 | male | Chief executive officer | sunil pichai | sunil pichai@gmail.com |
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 1 | 571 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 3 | 572 | CSE | 25 | male | Data Scientist | sunil pichai | sunil pichai@gmail.com |
| 2 | 571 | CSE | 25 | male | Data Analytics | roman reigns | roman@gmail.com |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | NULL | NULL | NULL | NULL | NULL | osama | NULL |

9 rows in set (0.00 sec)

mysql> update details

-> set rollnumber=577

-> where id=7;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update details

-> set section='IT'

-> where id=7;

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update details

-> set age=30

-> where id=7;

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update details

-> set gender='male'

-> where id=7;

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update details

-> set email='osama@gmail.com'

-> where id=7

-> where id=7;

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 'where id=7' at line 4

mysql> update details

-> -> set email='osama@gmail.com'

-> -> where id=7;

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 '-> set email='osama@gmail.com'

-> where id=7' at line 2

mysql> update details

-> set email='osama@gmail.com'

-> where id=7;

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select * from details;

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|------|--------|-------------------------|--------------|------------------------|
| 3 | 572 | CSE | 28 | male | Chief executive officer | sunil pichai | sunil pichai@gmail.com |
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 1 | 571 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 3 | 572 | CSE | 25 | male | Data Scientist | sunil pichai | sunil pichai@gmail.com |
| 2 | 571 | CSE | 25 | male | Data Analytics | roman reigns | roman@gmail.com |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | NULL | NULL | NULL | NULL | NULL | osama | NULL |

| | | | | | | | |
|---|-----|-----|----|------|---------------------------|--------------|------------------------|
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer | roman reigns | roman@gmail.com |
| 3 | 572 | CSE | 28 | male | Chief executive officer | sunil pichai | sunil pichai@gmail.com |
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 1 | 571 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 3 | 572 | CSE | 25 | male | Data Scientist | sunil pichai | sunil pichai@gmail.com |
| 2 | 571 | CSE | 25 | male | Data Analytics | roman reigns | roman@gmail.com |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | 577 | IT | 30 | male | NULL | osama | osama@gmail.com |

9 rows in set (0.00 sec)

```
mysql> update details
-> set specialisation='cyber security'
-> where id=7;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|---------------------------|--------------|------------------------|
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 2 | 571 | CSE | 28 | male | Machine Learning engineer | roman reigns | roman@gmail.com |
| 3 | 572 | CSE | 28 | male | Chief executive officer | sunil pichai | sunil pichai@gmail.com |
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 1 | 571 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 3 | 572 | CSE | 25 | male | Data Scientist | sunil pichai | sunil pichai@gmail.com |
| 2 | 571 | CSE | 25 | male | Data Analytics | roman reigns | roman@gmail.com |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |

9 rows in set (0.00 sec)

```
mysql> DELETE FROM details
-> WHERE id = 2;
Query OK, 2 rows affected (0.01 sec)
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|-------------------------|--------------|------------------------|
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 3 | 572 | CSE | 28 | male | Chief executive officer | sunil pichai | sunil pichai@gmail.com |
| 1 | 570 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 1 | 571 | CSE | 25 | male | software engineer | John Doe | john@gmail.com |
| 3 | 572 | CSE | 25 | male | Data Scientist | sunil pichai | sunil pichai@gmail.com |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |

7 rows in set (0.00 sec)


```
mysql> DELETE FROM details
-> WHERE id = 1 and section = 'CSE';
Query OK, 3 rows affected (0.00 sec)
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|-------------------------|--------------|------------------------|
| 3 | 572 | CSE | 28 | male | Chief executive officer | sunil pichai | sunil pichai@gmail.com |
| 3 | 572 | CSE | 25 | male | Data Scientist | sunil pichai | sunil pichai@gmail.com |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |

```
4 rows in set (0.00 sec)
```

```
mysql> insert into details
```

```
-> (id,rollnumber,section,age,gender,specialisation,name,email) values (9,589,'CSE',34,'male','Data Analyst','akbar','akbar@gmail.com');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into details
```

```
-> (id,rollnumber,section,age,gender,specialisation,name,email)
-> values
-> (10,590,'CSE',36,'male','Data Analyst','akbar','akbar@gmail.com');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from details
```

```
-> ;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|-------------------------|--------------|------------------------|
| 3 | 572 | CSE | 28 | male | Chief executive officer | sunil pichai | sunil pichai@gmail.com |
| 3 | 572 | CSE | 25 | male | Data Scientist | sunil pichai | sunil pichai@gmail.com |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com |

```
6 rows in set (0.00 sec)
```

```
mysql> DELETE FROM details
```

```
-> WHERE id = 3 AND section = 'CSE';
Query OK, 2 rows affected (0.00 sec)
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|----------------------|----------|-----------------|
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com |

```
4 rows in set (0.00 sec)
```

mysql> insert into details

-> (id,rollnumber,section,age,gender,specialisation,name,email)

-> values

-> (11,591,'IT',27,'male','Data Scientist','pichai','pi@gmail.com');

Query OK, 1 row affected (0.00 sec)

mysql> select * from details

-> ;

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|----------------------|----------|-----------------|
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com |
| 11 | 591 | IT | 27 | male | Data Scientist | pichai | pi@gmail.com |

5 rows in set (0.00 sec)

mysql> SELECT * FROM details;

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|----------------------|----------|-----------------|
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com |
| 11 | 591 | IT | 27 | male | Data Scientist | pichai | pi@gmail.com |

5 rows in set (0.00 sec)

mysql> SELECT * FROM details;

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|----------------------|----------|-----------------|
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com |
| 11 | 591 | IT | 27 | male | Data Scientist | pichai | pi@gmail.com |

5 rows in set (0.00 sec)

mysql> SELECT id, rollnumber, section FROM details;

| id | rollnumber | section |
|----|------------|---------|
| 1 | 570 | IT |
| 7 | 577 | IT |
| 9 | 589 | CSE |
| 10 | 590 | CSE |
| 11 | 591 | IT |

5 rows in set (0.00 sec)

mysql> select gender,name from details;

-----+

| gender | name |
|--------|----------|
| male | John Doe |
| male | osama |
| male | akbar |
| male | akbar |
| male | pichai |

5 rows in set (0.00 sec)

```
mysql> SELECT * FROM details WHERE section = 'CSE';
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|----------------|-------|-----------------|
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com |

2 rows in set (0.00 sec)

```
mysql> SELECT * FROM details WHERE section = 'CSE' AND age > 25;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|----------------|-------|-----------------|
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com |

2 rows in set (0.00 sec)

```
mysql> SELECT * FROM details WHERE section = 'CSE' OR section = 'IT';
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|----------------------|----------|-----------------|
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com |
| 11 | 591 | IT | 27 | male | Data Scientist | pichai | pi@gmail.com |

5 rows in set (0.00 sec)

```
mysql> SELECT * FROM details WHERE name LIKE 'J%';
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|----------------------|----------|----------------|
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |

1 row in set (0.00 sec)

```
mysql> SELECT * FROM details WHERE name LIKE 'i%';
```

Empty set (0.00 sec)

```
mysql> SELECT * FROM details ORDER BY age;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|----------------------|----------|----------------|
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 11 | 591 | IT | 27 | male | Data Scientist | pichai | pi@gmail.com |

| | | | | | | | |
|----|-----|-----|----|------|----------------|-------|-----------------|
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com |

5 rows in set (0.00 sec)

```
mysql> SELECT * FROM details ORDER BY section, rollnumber;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|----------------------|----------|-----------------|
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |
| 11 | 591 | IT | 27 | male | Data Scientist | pichai | pi@gmail.com |

5 rows in set (0.00 sec)

```
mysql> SELECT * FROM details ORDER BY age DESC;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|----------------------|----------|-----------------|
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com |
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |
| 11 | 591 | IT | 27 | male | Data Scientist | pichai | pi@gmail.com |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |

5 rows in set (0.00 sec)

```
mysql> SELECT * FROM details ORDER BY section ASC, age DESC;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|----------------------|----------|-----------------|
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com |
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |
| 11 | 591 | IT | 27 | male | Data Scientist | pichai | pi@gmail.com |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |

5 rows in set (0.00 sec)

```
mysql> SELECT * FROM details ORDER BY section ASC;
```

| id | rollnumber | section | age | gender | specialisation | name | email |
|----|------------|---------|-----|--------|----------------------|----------|-----------------|
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com |
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |
| 11 | 591 | IT | 27 | male | Data Scientist | pichai | pi@gmail.com |

5 rows in set (0.00 sec)

```
mysql> SELECT COUNT(*) AS total_rows FROM details;
```

| total_rows |
|------------|
|------------|

```

+-----+
|      5 |
+-----+

```

1 row in set (0.01 sec)

mysql> SELECT AVG(age) AS average_age FROM details WHERE section = 'CSE';

```

+-----+
| average_age |
+-----+
|   35.0000 |
+-----+

```

1 row in set (0.00 sec)

mysql> SELECT COUNT(*) AS total_columns FROM details;

```

+-----+
| total_columns |
+-----+
|          5 |
+-----+

```

1 row in set (0.00 sec)

mysql> SELECT AVG(age) AS average_age FROM details WHERE section = 'CSE';

```

+-----+
| average_age |
+-----+
|   35.0000 |
+-----+

```

1 row in set (0.00 sec)

mysql> SELECT MAX(age) AS max_age, MIN(age) AS min_age, AVG(age) AS average_age FROM details;

```

+-----+-----+-----+
| max_age | min_age | average_age |
+-----+-----+-----+
|    36 |    23 |    30.0000 |
+-----+-----+-----+

```

1 row in set (0.00 sec)

mysql> SELECT section, AVG(age) AS average_age FROM details GROUP BY section;

```

+-----+-----+
| section | average_age |
+-----+-----+
| IT      | 26.6667 |
| CSE     | 35.0000 |
+-----+-----+

```

2 rows in set (0.00 sec)

mysql> select * from details;

```

+-----+-----+-----+-----+-----+-----+-----+-----+
| id | rollNumber | section | age | gender | specialisation | name | email |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com |
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com |
| 11 | 591 | IT | 27 | male | Data Scientist | pichai | pi@gmail.com |
+-----+-----+-----+-----+-----+-----+-----+-----+

```

5 rows in set (0.00 sec)

```
mysql> ALTER TABLE details
```

```
-> ADD salary INT(50);
```

```
Query OK, 0 rows affected, 1 warning (0.02 sec)
```

```
Records: 0 Duplicates: 0 Warnings: 1
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email | salary |
|----|------------|---------|-----|--------|----------------------|----------|-----------------|--------|
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com | NULL |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com | NULL |
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com | NULL |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com | NULL |
| 11 | 591 | IT | 27 | male | Data Scientist | pichai | pi@gmail.com | NULL |

```
5 rows in set (0.00 sec)
```

```
mysql> insert into details
```

```
-> set salary=5000
```

```
-> where id=1;
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email | salary |
|----|------------|---------|-----|--------|----------------------|----------|-----------------|--------|
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com | NULL |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com | NULL |
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com | NULL |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com | NULL |
| 11 | 591 | IT | 27 | male | Data Scientist | pichai | pi@gmail.com | NULL |

```
5 rows in set (0.00 sec)
```

```
mysql> UPDATE details
```

```
-> SET name = 'John Doe'
```

```
-> WHERE id = 1;
```

```
Query OK, 0 rows affected (0.00 sec)
```

```
Rows matched: 1 Changed: 0 Warnings: 0
```

```
mysql> select * from details;
```

| id | rollnumber | section | age | gender | specialisation | name | email | salary |
|----|------------|---------|-----|--------|----------------------|----------|-----------------|--------|
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com | NULL |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com | NULL |
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com | NULL |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com | NULL |
| 11 | 591 | IT | 27 | male | Data Scientist | pichai | pi@gmail.com | NULL |

```
5 rows in set (0.00 sec)
```

```
mysql> update details
```

```
-> set salary=50000
```

```
-> where id=1;
```

```
Query OK, 1 row affected (0.00 sec)
```

```
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> update details
-> set salary=10000
-> where id=7;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> update details
-> set salary=15000
-> where id=9;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> update details
-> set salary=12000
-> where id=10;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> update details
-> set salary=16000
-> where id=11;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> select * from details;
+-----+-----+-----+-----+-----+-----+-----+-----+
| id | rollnumber | section | age | gender | specialisation | name | email | salary |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | 570 | IT | 23 | male | full stack developer | John Doe | john@gmail.com | 50000 |
| 7 | 577 | IT | 30 | male | cyber security | osama | osama@gmail.com | 10000 |
| 9 | 589 | CSE | 34 | male | Data Analyst | akbar | akbar@gmail.com | 15000 |
| 10 | 590 | CSE | 36 | male | Data Analyst | akbar | akbar@gmail.com | 12000 |
| 11 | 591 | IT | 27 | male | Data Scientist | pichai | pi@gmail.com | 16000 |
+-----+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

```
mysql> select sum(salary) from details;
+-----+
| sum(salary) |
+-----+
| 103000 |
+-----+
1 row in set (0.00 sec)
```

```
mysql> select sum(rollnumber) from details;
+-----+
| sum(rollnumber) |
+-----+
| 2917 |
+-----+
1 row in set (0.00 sec)
```

```
mysql> select sum(age) from details;
+-----+
| sum(age) |
+-----+
```

```
| 150 |  
+-----+  
1 row in set (0.00 sec)
```

```
mysql> SELECT COUNT(column_name) FROM table_name;  
ERROR 1146 (42S02): Table 'imad.table_name' doesn't exist  
mysql> SELECT COUNT(*) FROM employees;
```

```
+-----+  
| COUNT(*) |  
+-----+  
| 8 |  
+-----+  
1 row in set (0.01 sec)
```

```
mysql> SELECT AVG(salary) from details;
```

```
+-----+  
| AVG(salary) |  
+-----+  
| 20600.0000 |  
+-----+  
1 row in set (0.00 sec)
```

```
mysql> select ave(rollnumber) from details;  
ERROR 1305 (42000): FUNCTION imad.ave does not exist  
mysql> select min(salary) from details;
```

```
+-----+  
| min(salary) |  
+-----+  
| 10000 |  
+-----+  
1 row in set (0.07 sec)
```

```
mysql> select max(salary) from details;
```

```
+-----+  
| max(salary) |  
+-----+  
| 50000 |  
+-----+  
1 row in set (0.00 sec)
```