

Lesson 02 Demo 01

Insert, Update, Delete Records from Table

Objective: To insert, update, & delete the records in a table

Tool required: MySQL

Prerequisites: SQL

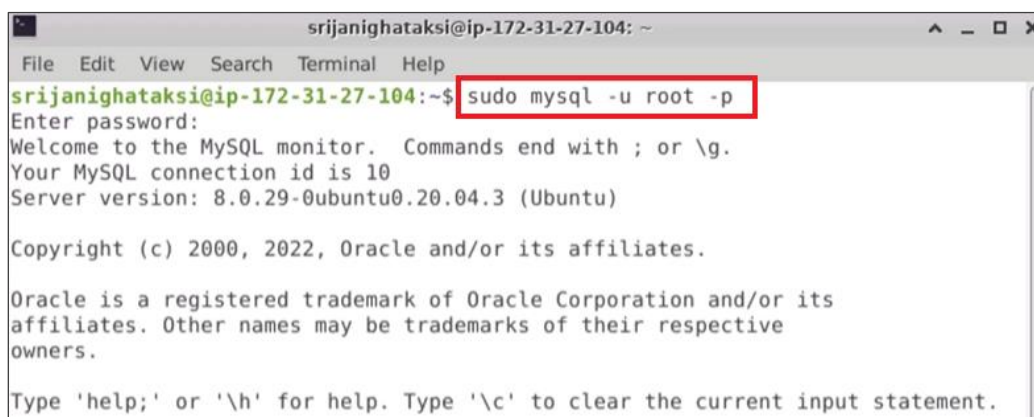
Steps to be followed:

1. Create a new table
2. Insert records in the table
3. Update records in the table
4. Delete records from the table
5. Commit the files
6. Add remote URL for the repository
7. Push the files
8. Edit index.html file
9. Commit and push the changes

Step 1: Create a new table

1.1 Login to the terminal in lab and type the following command to open MySQL shell:

sudo mysql -u root -p (password is empty for this root user)

A terminal window titled 'srijanighataksi@ip-172-31-27-104: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The prompt is 'srijanighataksi@ip-172-31-27-104:~\$' and the command 'sudo mysql -u root -p' is entered and highlighted with a red box. The output shows the MySQL monitor welcome message, connection ID 10, server version 8.0.29-0ubuntu0.20.04.3 (Ubuntu), copyright notice, and usage instructions.

```
srijanighataksi@ip-172-31-27-104:~$ sudo mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.29-0ubuntu0.20.04.3 (Ubuntu)

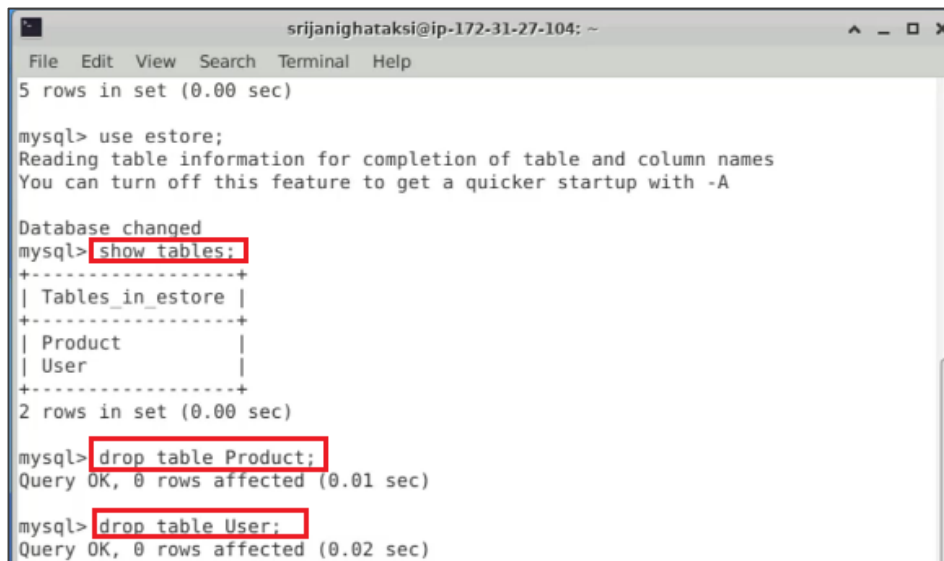
Copyright (c) 2000, 2022, Oracle and/or its affiliates.

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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.
```

1.2 Switch to the estore database and then delete existing tables using the below commands:

```
use estore;
show tables;
drop table Product;
drop table User;
```



```
srijanighataksi@ip-172-31-27-104: ~
File Edit View Search Terminal Help
5 rows in set (0.00 sec)

mysql> use estore;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

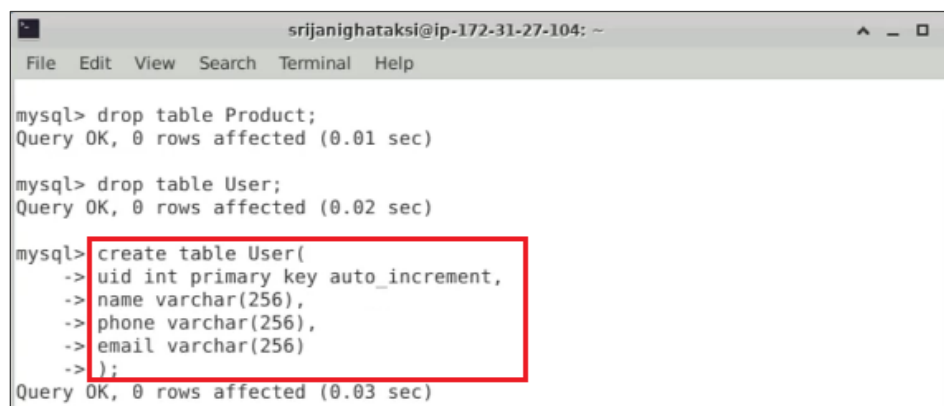
Database changed
mysql> show tables;
+-----+
| Tables_in_estore |
+-----+
| Product           |
| User              |
+-----+
2 rows in set (0.00 sec)

mysql> drop table Product;
Query OK, 0 rows affected (0.01 sec)

mysql> drop table User;
Query OK, 0 rows affected (0.02 sec)
```

1.3 Create a table using the following commands:

```
create table User(
    uid int primary key auto_increment,
    name varchar(256),
    phone varchar(256),
    email varchar(256),
);
```



```
srijanighataksi@ip-172-31-27-104: ~
File Edit View Search Terminal Help

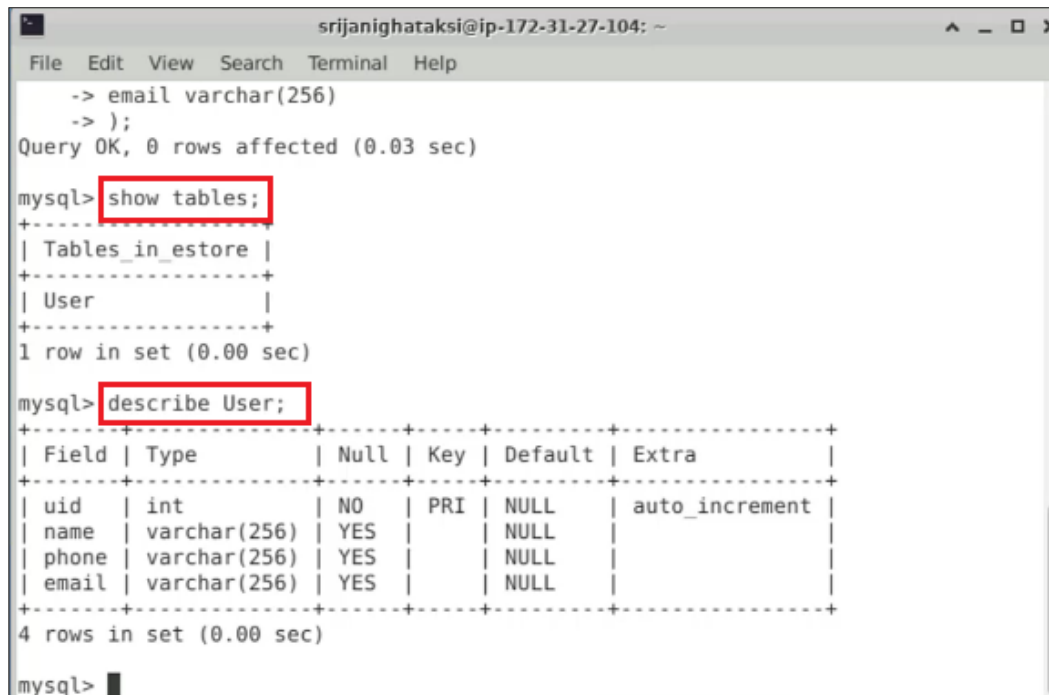
mysql> drop table Product;
Query OK, 0 rows affected (0.01 sec)

mysql> drop table User;
Query OK, 0 rows affected (0.02 sec)

mysql> create table User(
-> uid int primary key auto_increment,
-> name varchar(256),
-> phone varchar(256),
-> email varchar(256)
-> );
Query OK, 0 rows affected (0.03 sec)
```

1.4 Create a table using the following commands:

show tables;
describe User;



```
srijanighataksi@ip-172-31-27-104: ~
File Edit View Search Terminal Help
-> email varchar(256)
-> );
Query OK, 0 rows affected (0.03 sec)

mysql> show tables;
+-----+
| Tables_in_estore |
+-----+
| User              |
+-----+
1 row in set (0.00 sec)

mysql> describe User;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| uid   | int           | NO   | PRI | NULL    | auto_increment |
| name  | varchar(256)  | YES  |     | NULL    |                |
| phone | varchar(256)  | YES  |     | NULL    |                |
| email | varchar(256)  | YES  |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
```

Step 2: Insert records in the table

2.1 Insert the first row using the commands given below:

insert into User values(null, 'John Watson', '+91 99999 11111', 'john@example.com');
select * from User;



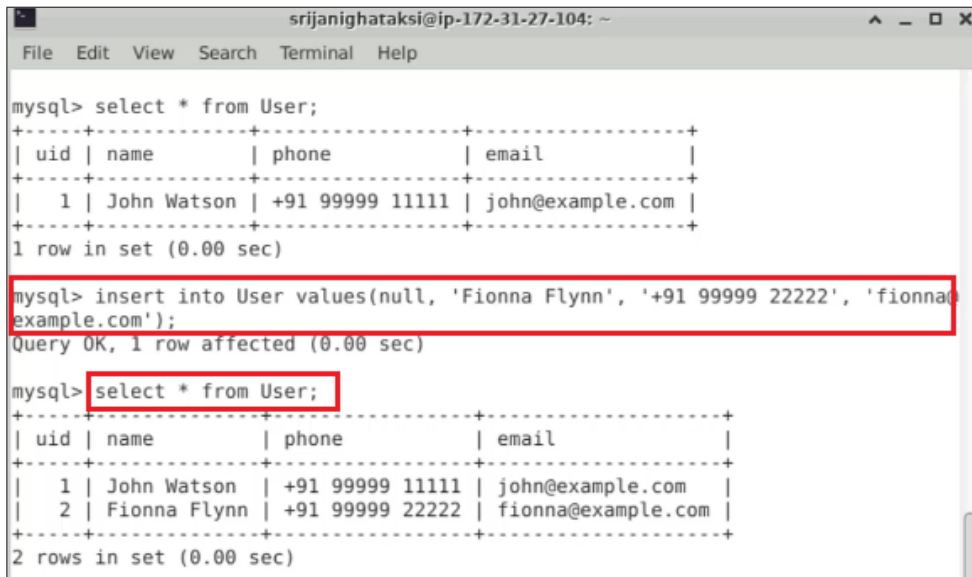
```
mysql> insert into User values(null, 'John Watson', '+91 99999 11111', 'john@example.com');
Query OK, 1 row affected (0.01 sec)

mysql> select * from User;
+-----+-----+-----+-----+
| uid | name      | phone          | email          |
+-----+-----+-----+-----+
| 1   | John Watson | +91 99999 11111 | john@example.com |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```

2.2 Insert the second row using the commands given below:

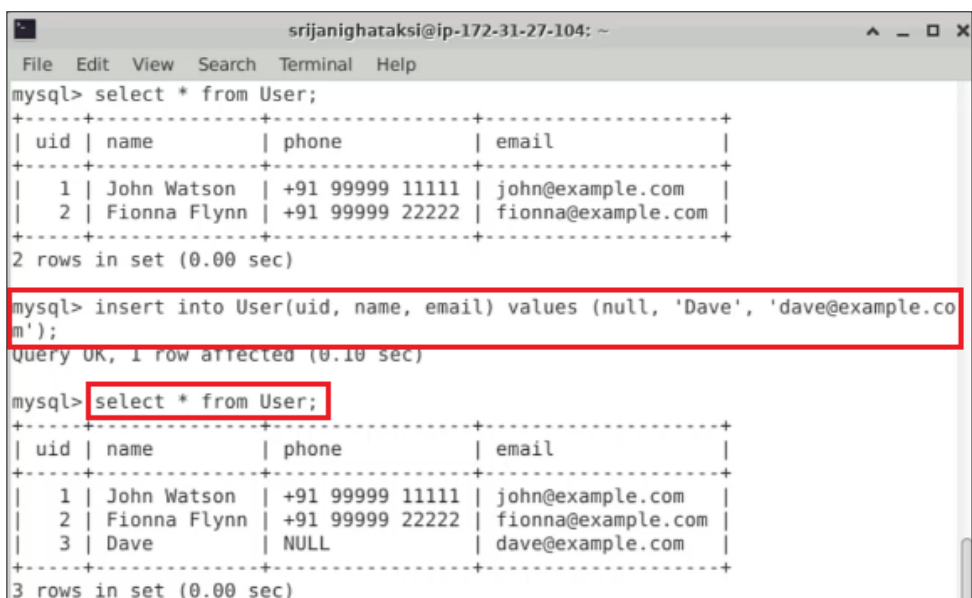
```
insert into User values(null, 'Fionna Flynn', '+91 99999 22222',  
'fionna@example.com');  
select * from User;
```



```
srijanighataksi@ip-172-31-27-104: ~  
File Edit View Search Terminal Help  
  
mysql> select * from User;  
+-----+-----+-----+-----+  
| uid | name      | phone      | email      |  
+-----+-----+-----+-----+  
| 1 | John Watson | +91 99999 11111 | john@example.com |  
+-----+-----+-----+-----+  
1 row in set (0.00 sec)  
  
mysql> insert into User values(null, 'Fionna Flynn', '+91 99999 22222', 'fionna@example.com');  
Query OK, 1 row affected (0.00 sec)  
  
mysql> select * from User;  
+-----+-----+-----+-----+  
| uid | name      | phone      | email      |  
+-----+-----+-----+-----+  
| 1 | John Watson | +91 99999 11111 | john@example.com |  
| 2 | Fionna Flynn | +91 99999 22222 | fionna@example.com |  
+-----+-----+-----+-----+  
2 rows in set (0.00 sec)
```

2.3 Insert the third row (without phone number) using the commands given below:

```
insert into User (uid, name, email) values (null, 'Dave', 'dave@example.com');  
select * from User;
```

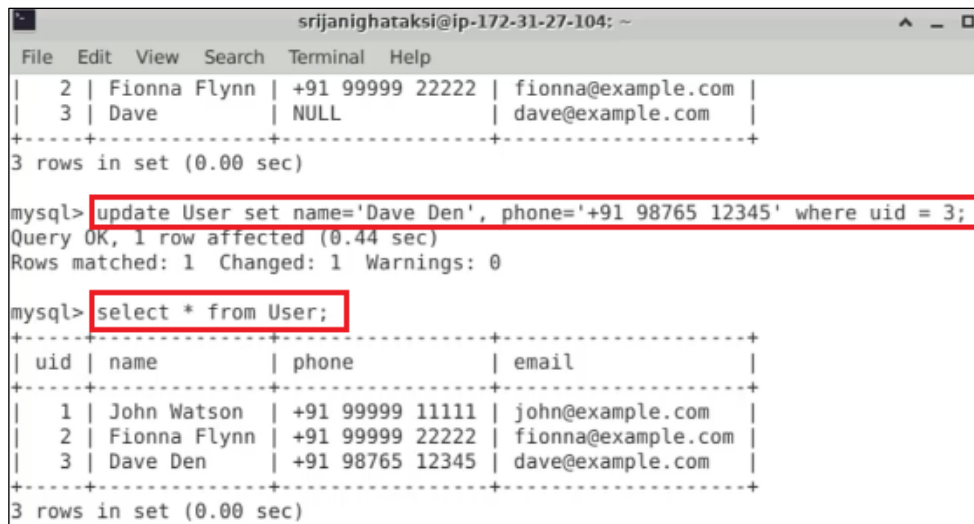


```
srijanighataksi@ip-172-31-27-104: ~  
File Edit View Search Terminal Help  
  
mysql> select * from User;  
+-----+-----+-----+-----+  
| uid | name      | phone      | email      |  
+-----+-----+-----+-----+  
| 1 | John Watson | +91 99999 11111 | john@example.com |  
| 2 | Fionna Flynn | +91 99999 22222 | fionna@example.com |  
+-----+-----+-----+-----+  
2 rows in set (0.00 sec)  
  
mysql> insert into User(uid, name, email) values (null, 'Dave', 'dave@example.com');  
Query OK, 1 row affected (0.10 sec)  
  
mysql> select * from User;  
+-----+-----+-----+-----+  
| uid | name      | phone      | email      |  
+-----+-----+-----+-----+  
| 1 | John Watson | +91 99999 11111 | john@example.com |  
| 2 | Fionna Flynn | +91 99999 22222 | fionna@example.com |  
| 3 | Dave       | NULL       | dave@example.com |  
+-----+-----+-----+-----+  
3 rows in set (0.00 sec)
```

Step 3: Update the records in the table

3.1 Update the values using the following commands:

```
update User set name='Dave Den', phone='+91 98765 12345' where uid = 3;  
select * from User;
```

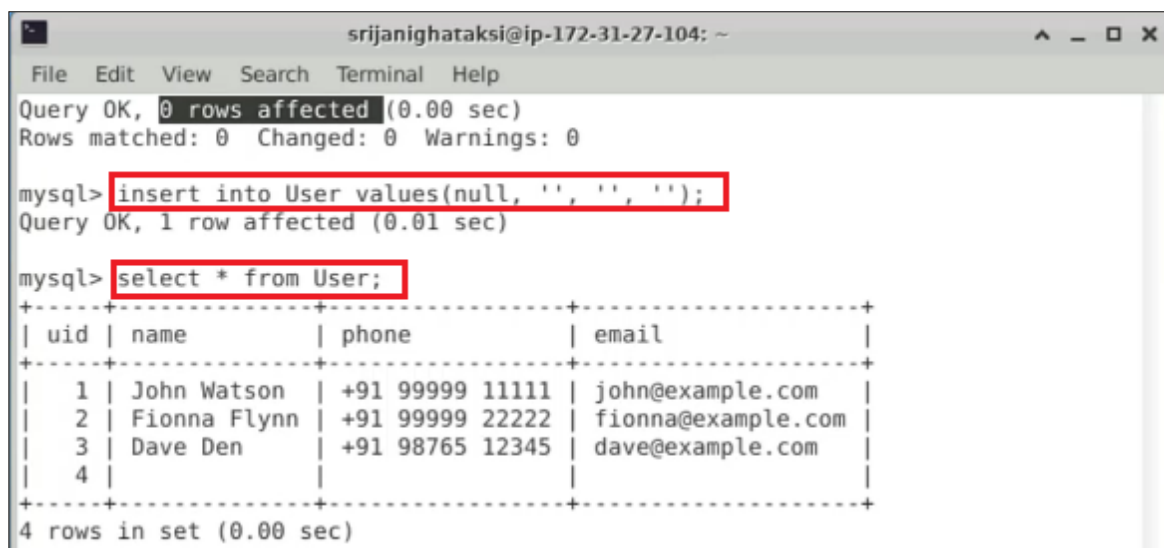


A terminal window titled 'srijanighataksi@ip-172-31-27-104: ~' showing MySQL commands and their output. The first command is 'update User set name='Dave Den', phone='+91 98765 12345' where uid = 3;', which is highlighted with a red box. The output shows 'Query OK, 1 row affected (0.44 sec)' and 'Rows matched: 1 Changed: 1 Warnings: 0'. The second command is 'select * from User;', also highlighted with a red box. The output shows a table with 3 rows: John Watson, Fiona Flynn, and Dave Den. The table structure is as follows:

uid	name	phone	email
1	John Watson	+91 99999 11111	john@example.com
2	Fionna Flynn	+91 99999 22222	fionna@example.com
3	Dave Den	+91 98765 12345	dave@example.com

3.2 Insert another row in the table using the following commands:

```
insert into User values(null, '', '', '');  
select * from User;
```

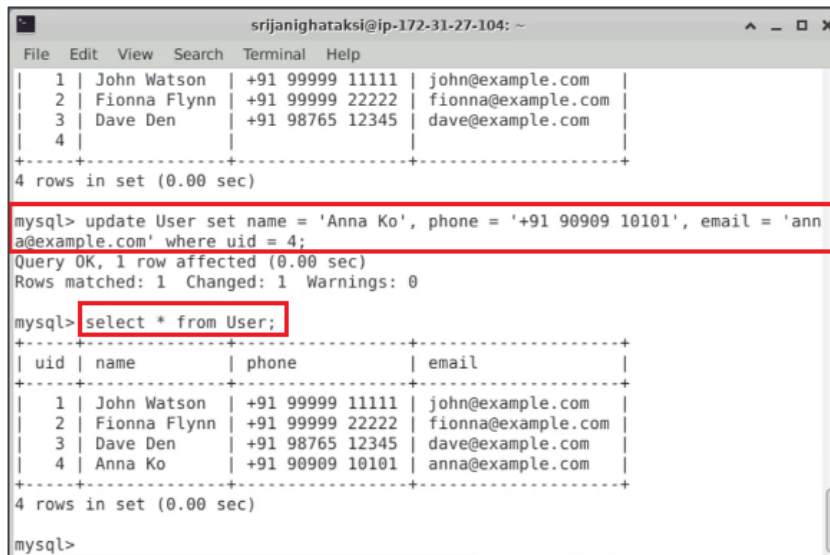


A terminal window titled 'srijanighataksi@ip-172-31-27-104: ~' showing MySQL commands and their output. The first command is 'insert into User values(null, '', '', '');', which is highlighted with a red box. The output shows 'Query OK, 1 row affected (0.01 sec)'. The second command is 'select * from User;', also highlighted with a red box. The output shows a table with 4 rows: John Watson, Fiona Flynn, Dave Den, and a new row with null values. The table structure is as follows:

uid	name	phone	email
1	John Watson	+91 99999 11111	john@example.com
2	Fionna Flynn	+91 99999 22222	fionna@example.com
3	Dave Den	+91 98765 12345	dave@example.com
4			

3.3 Update the new row in the table using the following commands:

```
update User set name = 'Anna Ko', phone = '+91 90909 10101', email =  
'anna@example.com' where uid = 4;  
select * from User;
```



A terminal window titled 'srijanighataksi@ip-172-31-27-104: ~' showing MySQL commands and results. The initial table has 4 rows. The command 'update User set name = 'Anna Ko', phone = '+91 90909 10101', email = 'anna@example.com' where uid = 4;' is executed, affecting 1 row. Then 'select * from User;' is executed, showing the updated table with 4 rows.

```
srijanighataksi@ip-172-31-27-104: ~  
File Edit View Search Terminal Help  
+-----+  
| uid | name      | phone      | email      |  
+-----+  
| 1 | John Watson | +91 99999 11111 | john@example.com |  
| 2 | Fiona Flynn | +91 99999 22222 | fionna@example.com |  
| 3 | Dave Den   | +91 98765 12345 | dave@example.com |  
| 4 |           |           |           |  
+-----+  
4 rows in set (0.00 sec)  
  
mysql> update User set name = 'Anna Ko', phone = '+91 90909 10101', email = 'anna@example.com' where uid = 4;  
Query OK, 1 row affected (0.00 sec)  
Rows matched: 1  Changed: 1  Warnings: 0  
  
mysql> select * from User;  
+-----+  
| uid | name      | phone      | email      |  
+-----+  
| 1 | John Watson | +91 99999 11111 | john@example.com |  
| 2 | Fiona Flynn | +91 99999 22222 | fionna@example.com |  
| 3 | Dave Den   | +91 98765 12345 | dave@example.com |  
| 4 | Anna Ko    | +91 90909 10101 | anna@example.com |  
+-----+  
4 rows in set (0.00 sec)  
  
mysql>
```

Step 4: Delete the record

4.1 Delete a row using the following commands:

```
delete from User where uid = 3;  
select * from User;
```



A terminal window titled 'srijanighataksi@ip-172-31-27-104: ~' showing MySQL commands and results. The initial table has 4 rows. The command 'delete from User where uid = 3;' is executed, affecting 1 row. Then 'select * from User;' is executed, showing the table with 3 rows.

```
srijanighataksi@ip-172-31-27-104: ~  
File Edit View Search Terminal Help  
+-----+  
| uid | name      | phone      | email      |  
+-----+  
| 1 | John Watson | +91 99999 11111 | john@example.com |  
| 2 | Fiona Flynn | +91 99999 22222 | fionna@example.com |  
| 3 | Dave Den   | +91 98765 12345 | dave@example.com |  
| 4 | Anna Ko    | +91 90909 10101 | anna@example.com |  
+-----+  
4 rows in set (0.00 sec)  
  
mysql> delete from User where uid = 3;  
Query OK, 1 row affected (0.00 sec)  
  
mysql> select * from User;  
+-----+  
| uid | name      | phone      | email      |  
+-----+  
| 1 | John Watson | +91 99999 11111 | john@example.com |  
| 2 | Fiona Flynn | +91 99999 22222 | fionna@example.com |  
| 4 | Anna Ko    | +91 90909 10101 | anna@example.com |  
+-----+  
3 rows in set (0.00 sec)  
  
mysql>
```