

MODERN APPLICATION DEVELOPMENT

JAVA SPRING BOOT

WEEK-2 ASSIGNMENT

NAME : YOGESHWARAN R

REG NO : 20MIS0080

EMAIL : yogeshwaran.r2020@vitstudent.ac.in

Drive Link : [https://docs.google.com/document/d/1zNI0Tf-L6F_SHIG6TVdICVyxYg5ZltyJ/edit?usp=share link&oid=109521102766593881693&rtpof=true&sd=true](https://docs.google.com/document/d/1zNI0Tf-L6F_SHIG6TVdICVyxYg5ZltyJ/edit?usp=share_link&oid=109521102766593881693&rtpof=true&sd=true)

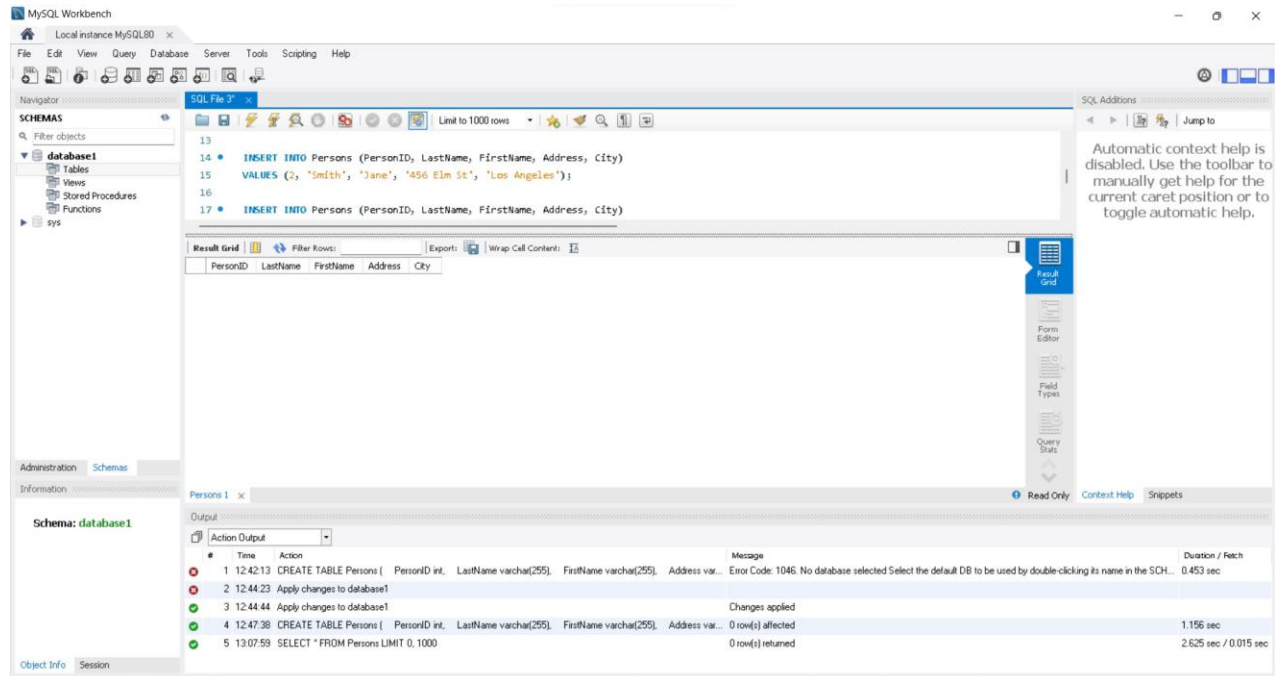
1) Create, Update, Delete commands in MySQL

Create table :

Code:

```
CREATE TABLE Persons (  
    PersonID int,  
    LastName varchar(255),  
    FirstName varchar(255),  
    Address varchar(255),  
    City varchar(255)  
);
```

Output:



Insert:

Code:

```
INSERT INTO Persons (PersonID, LastName, FirstName, Address, City)
VALUES (1, 'Doe', 'John', '123 Main St', 'New York');
```

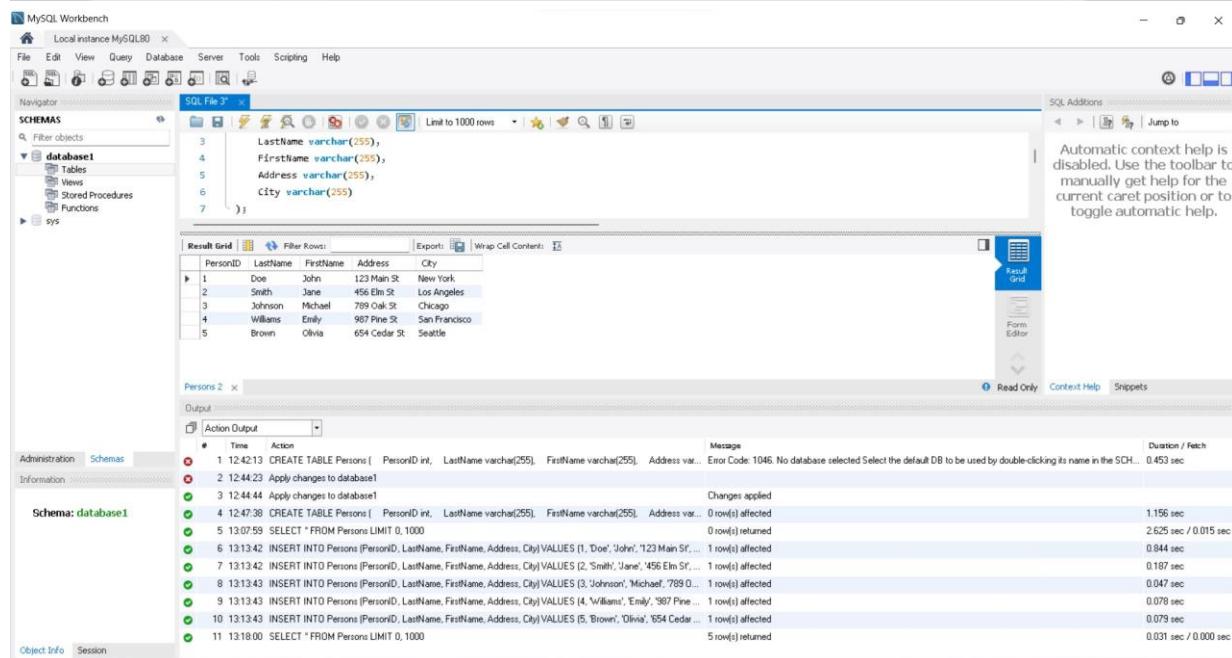
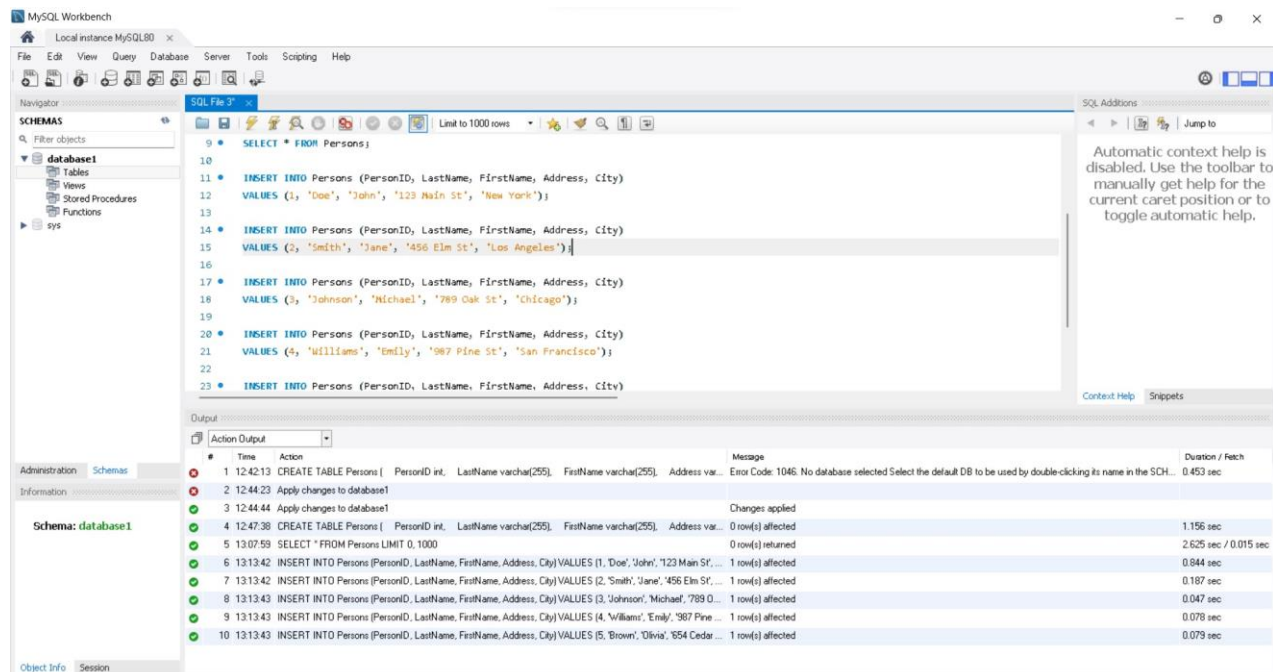
```
INSERT INTO Persons (PersonID, LastName, FirstName, Address, City)
VALUES (2, 'Smith', 'Jane', '456 Elm St', 'Los Angeles');
```

```
INSERT INTO Persons (PersonID, LastName, FirstName, Address, City)
VALUES (3, 'Johnson', 'Michael', '789 Oak St', 'Chicago');
```

```
INSERT INTO Persons (PersonID, LastName, FirstName, Address, City)
VALUES (4, 'Williams', 'Emily', '987 Pine St', 'San Francisco');
```

```
INSERT INTO Persons (PersonID, LastName, FirstName, Address, City)
VALUES (5, 'Brown', 'Olivia', '654 Cedar St', 'Seattle');
```

Output:



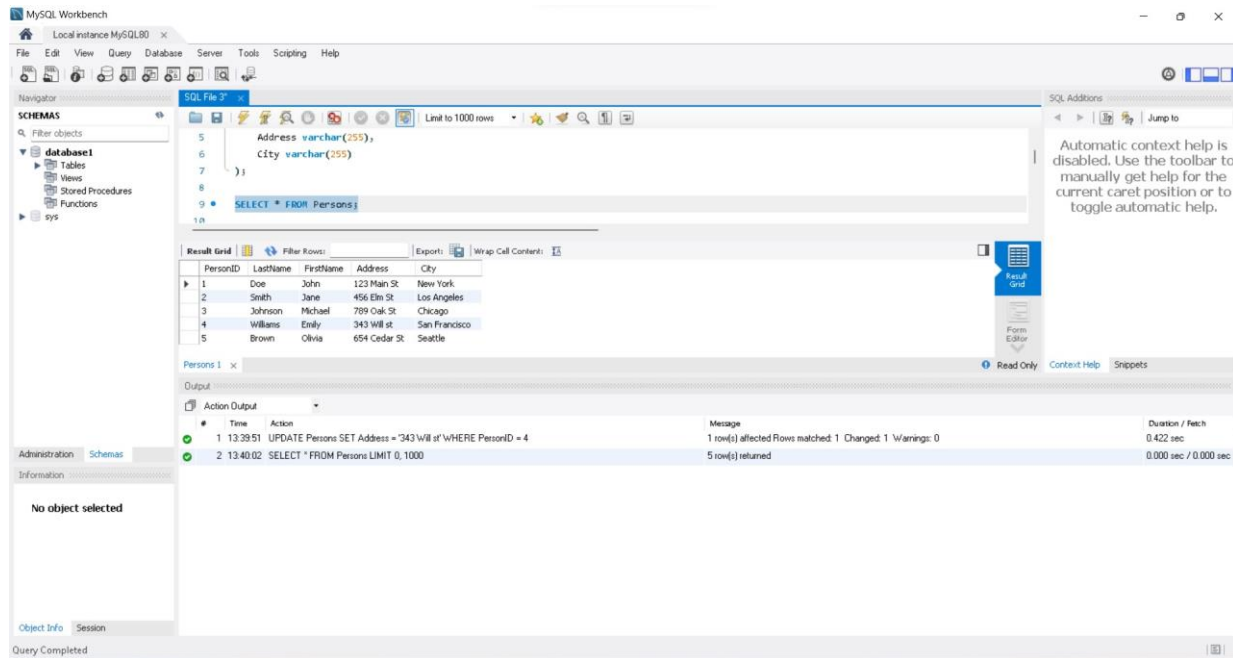
Update:

Code:

UPDATE Persons

SET Address = '343 Will st'
WHERE PersonID = 4;

Output:



The screenshot shows the MySQL Workbench interface. The SQL Editor contains the following query:

```
5 Address varchar(255),  
6 City varchar(255)  
7 }  
8 }  
9 SELECT * FROM Persons;  
10
```

The Result Grid displays the following data:

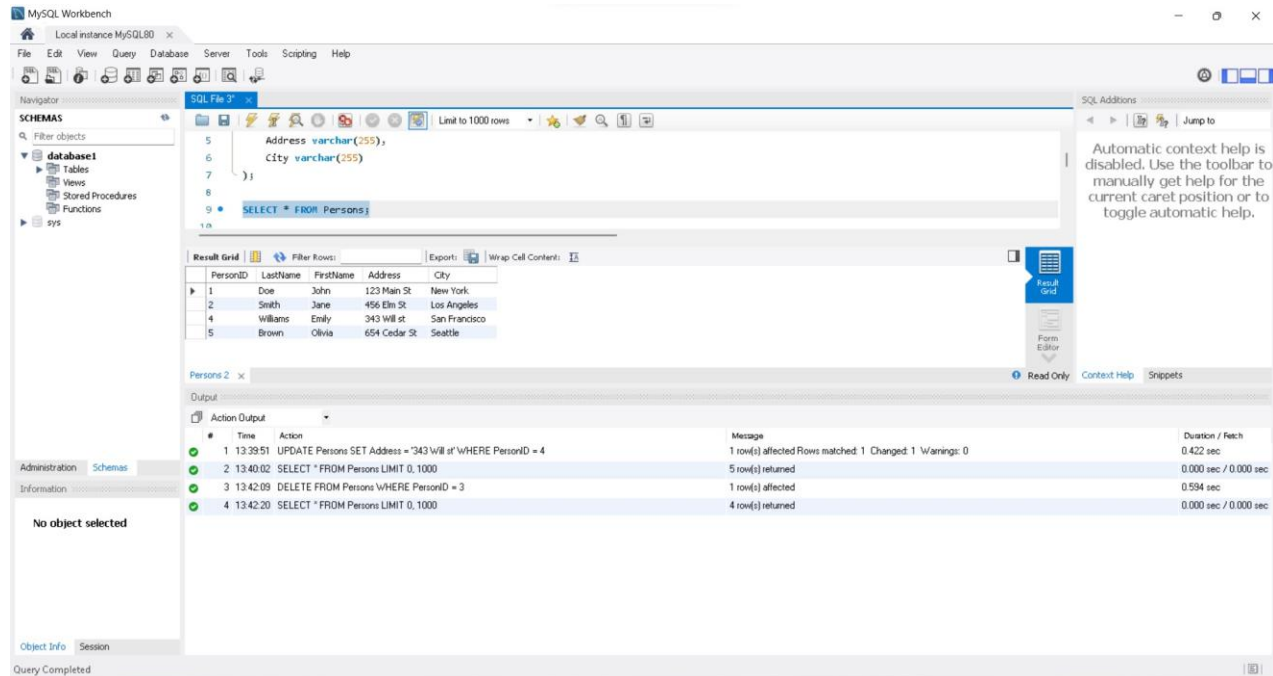
PersonID	LastName	FirstName	Address	City
1	Doe	John	123 Main St	New York
2	Smith	Jane	456 Elm St	Los Angeles
3	Johnson	Michael	789 Oak St	Chicago
4	Williams	Emily	343 Will st	San Francisco
5	Brown	Olivia	654 Cedar St	Seattle

The Output tab shows the execution log:

#	Time	Action	Message	Duration / Fetch
1	13:39:51	UPDATE Persons SET Address = '343 Will st' WHERE PersonID = 4	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.422 sec
2	13:40:02	SELECT * FROM Persons LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

Delete:

DELETE FROM Persons WHERE PersonID = 3;



2) Create table and joins in MySQL

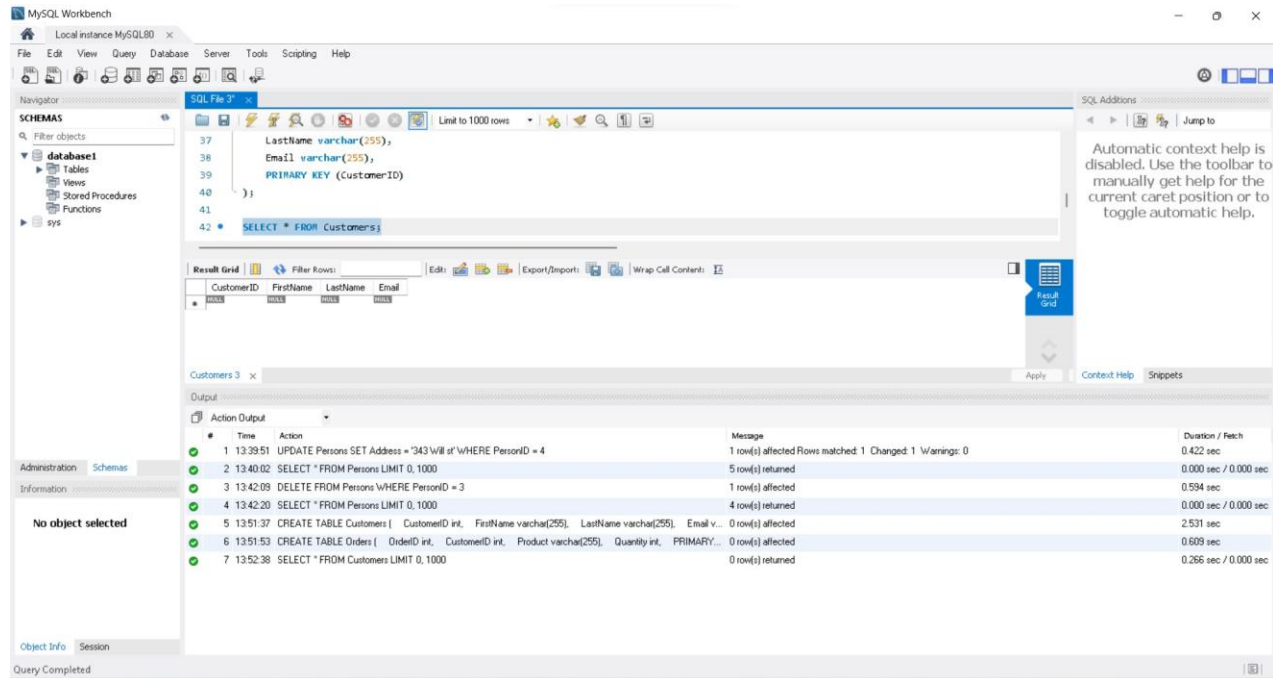
Code:

Create table:

```

CREATE TABLE Customers (
    CustomerID int,
    FirstName varchar(255),
    LastName varchar(255),
    Email varchar(255),
    PRIMARY KEY (CustomerID)
);

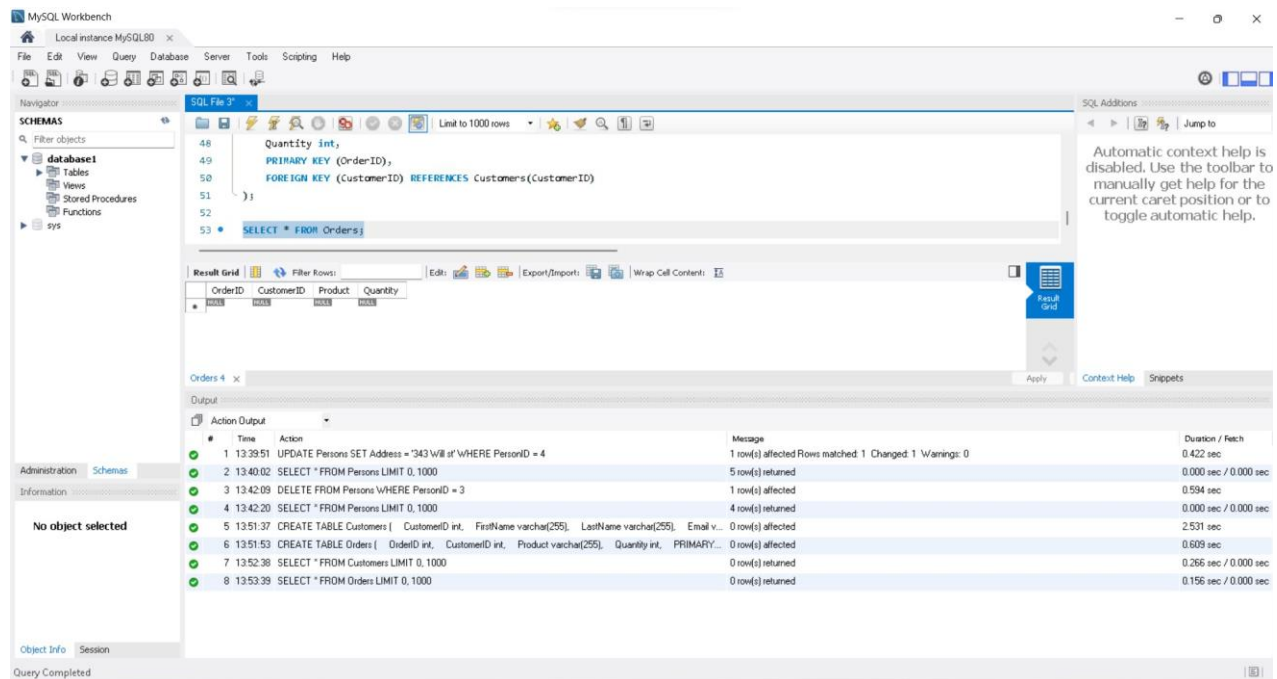
```



```

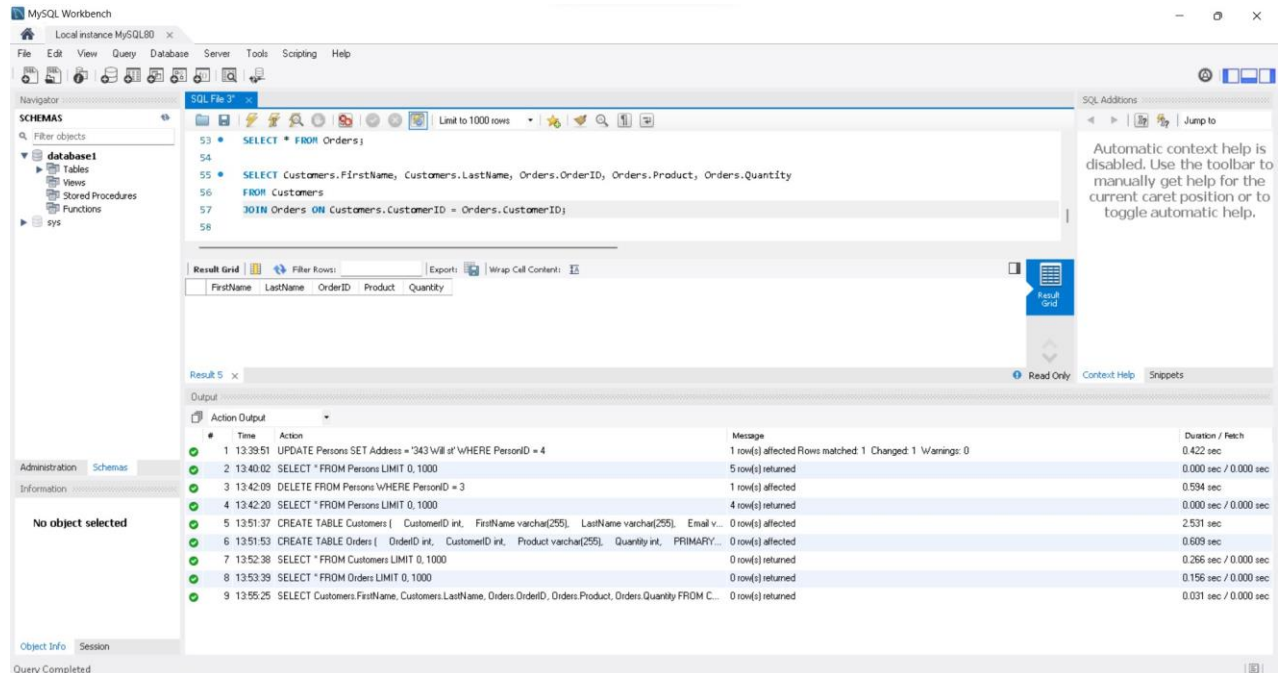
CREATE TABLE Orders (
    OrderID int,
    CustomerID int,
    Product varchar(255),
    Quantity int,
    PRIMARY KEY (OrderID),
    FOREIGN KEY (CustomerID) REFERENCES
Customers(CustomerID)
);

```



JOIN:

SELECT Customers.FirstName, Customers.LastName, Orders.OrderID,
Orders.Product, Orders.Quantity
FROM Customers
JOIN Orders ON Customers.CustomerID = Orders.CustomerID;

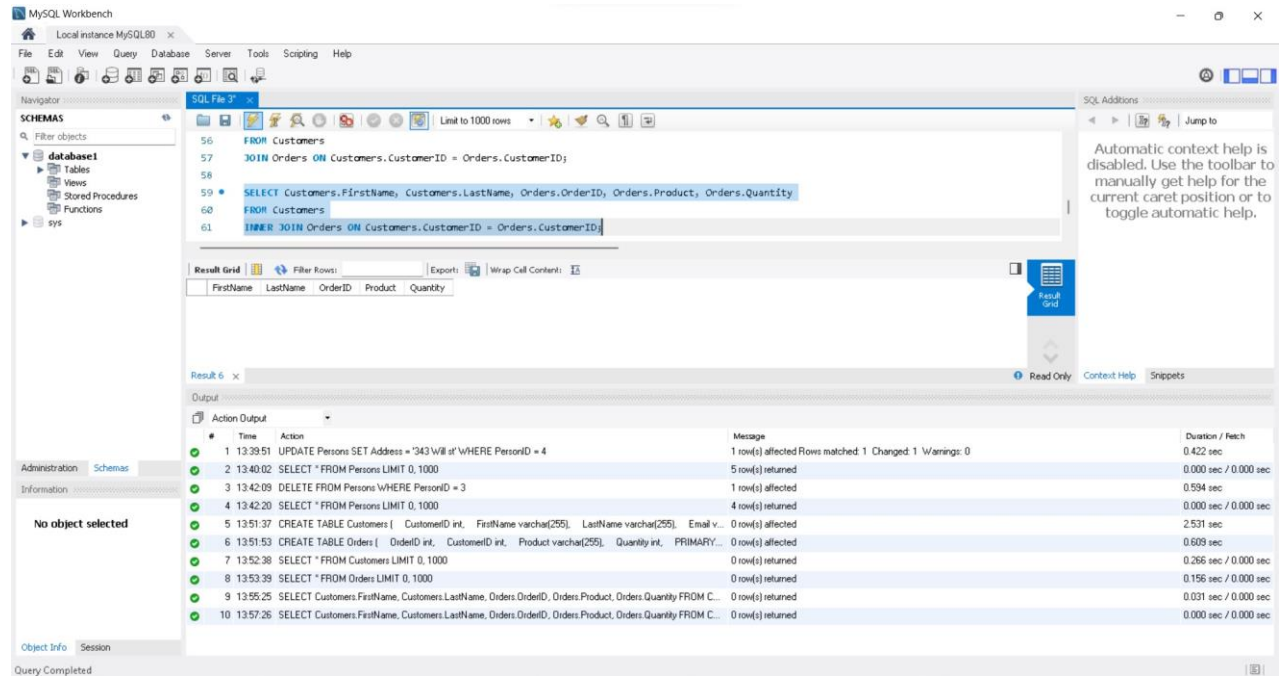


INNER JOIN:

SELECT Customers.FirstName, Customers.LastName, Orders.OrderID,
Orders.Product, Orders.Quantity

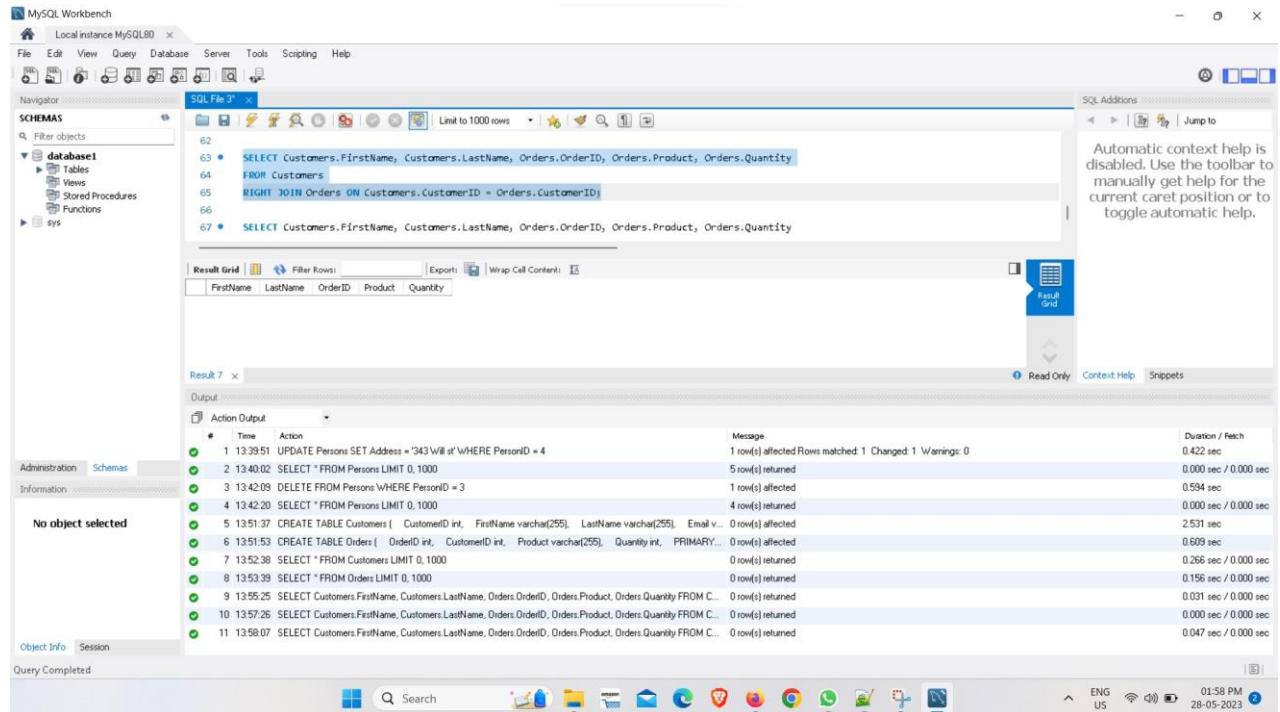
FROM Customers

INNER JOIN Orders ON Customers.CustomerID = Orders.CustomerID;



RIGHT JOIN:

SELECT Customers.FirstName, Customers.LastName, Orders.OrderID,
Orders.Product, Orders.Quantity
FROM Customers
RIGHT JOIN Orders ON Customers.CustomerID = Orders.CustomerID;

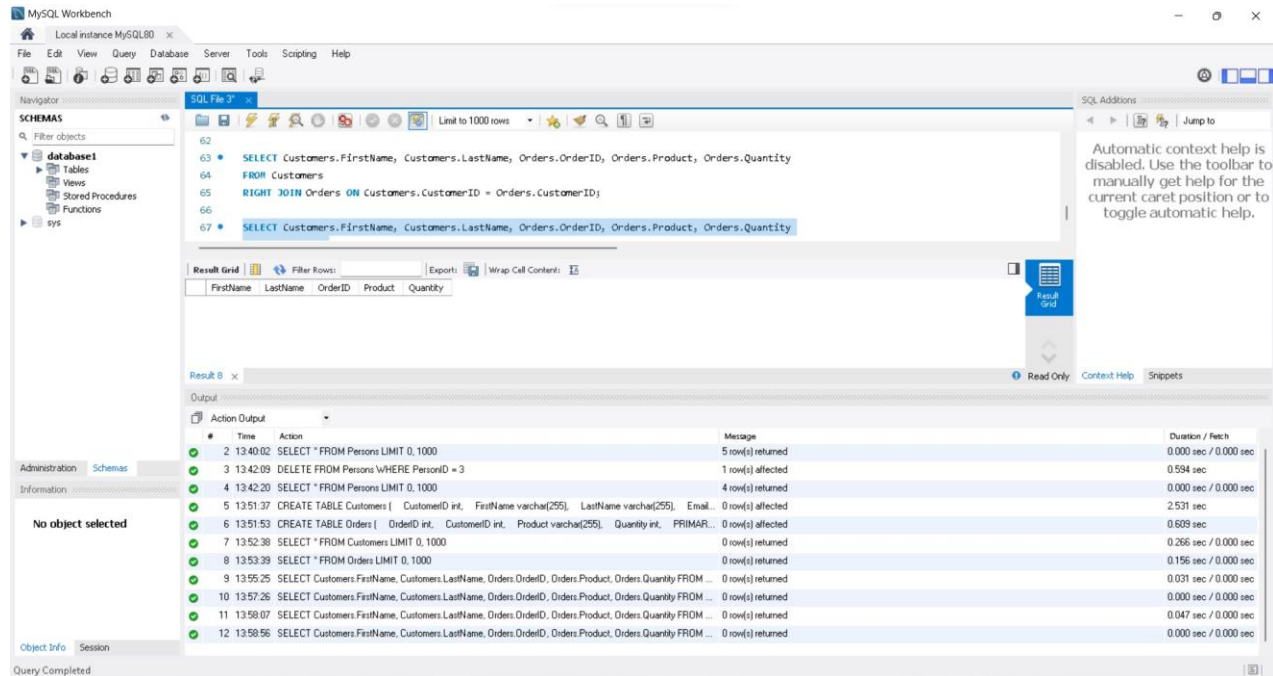


LEFT JOIN:

```

SELECT Customers.FirstName, Customers.LastName, Orders.OrderID,
Orders.Product, Orders.Quantity
FROM Customers
LEFT JOIN Orders ON Customers.CustomerID = Orders.CustomerID;

```



3) Create , update, delete commands in mongo

Create:

db.Persons.insertOne({personid:"1",name:"williams",age:"20",Adress:"852 pine st"})

db.Persons.insertOne({personid:"3",name:"john",age:"21",Adress:"564 main st"})

db.Persons.insertOne({personid:"2",name:"smith",age:"19",Adress:"123 will st"})

db.Persons.insertOne({personid:"4",name:"jane",age:"23",Adress:"496 elm st"})

db.Persons.insertOne({personid:"5",name:"johnson",age:"22",Adress:"480 main st"})

```
> db.Persons.insertOne({personid:"1",name:"williams",age:"20",Adress:"852 pine st"})
< {
  acknowledged: true,
  insertedId: ObjectId("64737385ba449ae5e1aede78")
}
> db.Persons.insertOne({personid:"3",name:"john",age:"21",Adress:"564 main st"})
< {
  acknowledged: true,
  insertedId: ObjectId("64737318ba449ae5e1aede79")
}
> db.Persons.insertOne({personid:"2",name:"smith",age:"19",Adress:"123 will st"})
< {
  acknowledged: true,
  insertedId: ObjectId("6473732dba449ae5e1aede7a")
}
> db.Persons.insertOne({personid:"4",name:"jane",age:"23",Adress:"496 elm st"})
< {
  acknowledged: true,
  insertedId: ObjectId("64737340ba449ae5e1aede7b")
}
> db.Persons.insertOne({personid:"5",name:"johnson",age:"22",Adress:"480 main st"})
< {
  acknowledged: true,
  insertedId: ObjectId("64737357ba449ae5e1aede7c")
}
```

Update:

```
db.Persons.updateOne({_id:ObjectId('64732a2f1ad1dfd43f46f571')}, {$set:{age:"24"}})
```

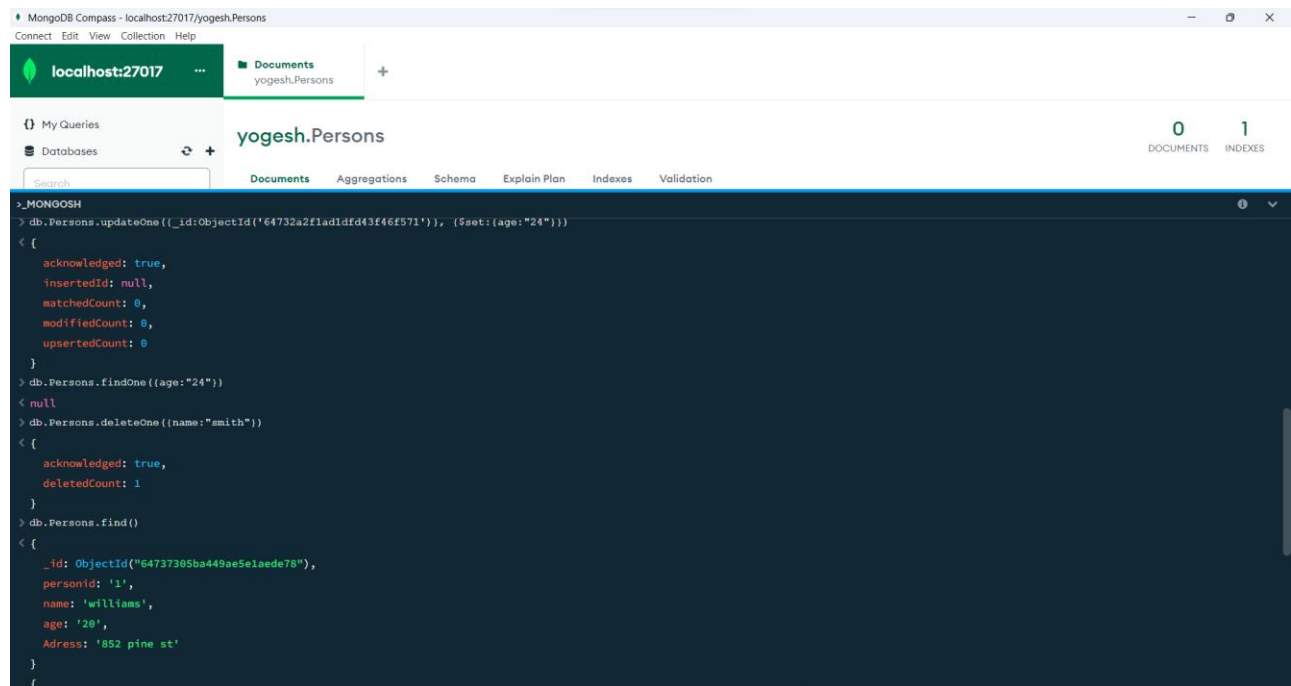
```
db.Persons.findOne({age:"24"})
```

```
> db.Persons.insertOne({personid:"4",name:"jane",age:"23",Adress:"496 elm st"})
< {
  acknowledged: true,
  insertedId: ObjectId("64737340ba449ae5e1aede7b")
}
> db.Persons.insertOne({personid:"5",name:"johnson",age:"22",Adress:"480 main st"})
< {
  acknowledged: true,
  insertedId: ObjectId("64737357ba449ae5e1aede7c")
}
> db.Persons.updateOne({_id:ObjectId('64732a2f1ad1dfd43f46f571')}, {$set:{age:"24"}})
< {
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
> db.Persons.findOne({age:"24"})
< null
test>
```

Delete:

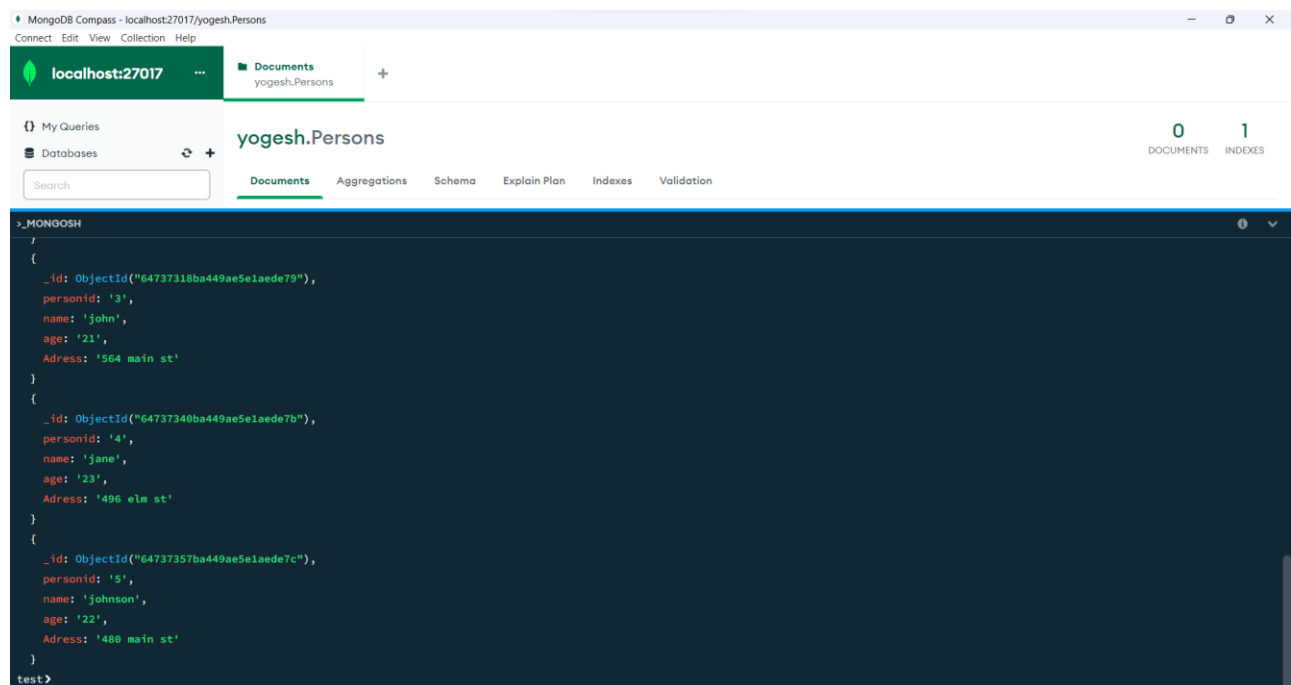
```
db.Persons.deleteOne({name:"smith"})
```

```
db.Persons.find()
```



The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'localhost:27017' and the database 'yogesh.Persons'. The left sidebar shows 'My Queries' and 'Databases'. The main panel displays the 'Documents' tab for 'yogesh.Persons', showing 0 documents and 1 index. The command window shows the following commands and results:

```
> db.Persons.updateOne({'_id:ObjectId('64732a2f1ad1fd43f46f571')'}, {'$set:{age:"24"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
> db.Persons.findOne({age:"24"})
null
> db.Persons.deleteOne({name:"smith"})
{
  acknowledged: true,
  deletedCount: 1
}
> db.Persons.find()
{
  _id: ObjectId("64737385ba449ae5e1aede78"),
  personId: '1',
  name: 'williams',
  age: '20',
  Address: '852 pine st'
}
```



The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'localhost:27017' and the database 'yogesh.Persons'. The left sidebar shows 'My Queries' and 'Databases'. The main panel displays the 'Documents' tab for 'yogesh.Persons', showing 0 documents and 1 index. The command window shows the following commands and results:

```
> db.Persons.find()
[
  {
    _id: ObjectId("64737318ba449ae5e1aede79"),
    personId: '3',
    name: 'john',
    age: '21',
    Address: '564 main st'
  },
  {
    _id: ObjectId("64737340ba449ae5e1aede7b"),
    personId: '4',
    name: 'jane',
    age: '23',
    Address: '496 elm st'
  },
  {
    _id: ObjectId("64737357ba449ae5e1aede7c"),
    personId: '5',
    name: 'johnson',
    age: '22',
    Address: '488 main st'
  }
]
test>
```

