ASSIGNMENT-2

NAME: CH POOJA

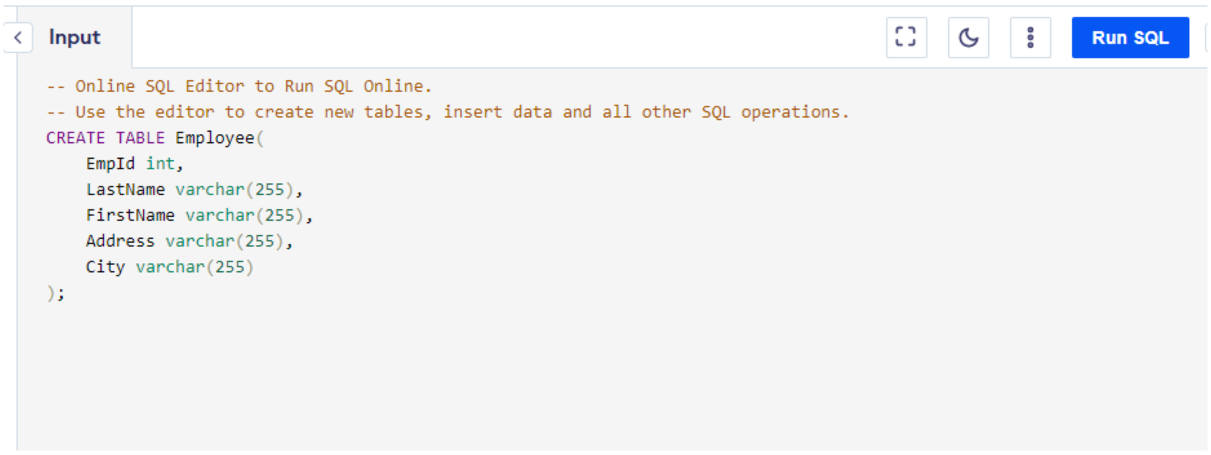
REG. NO.: 20BCE7630

Creating a Table:

CODE:

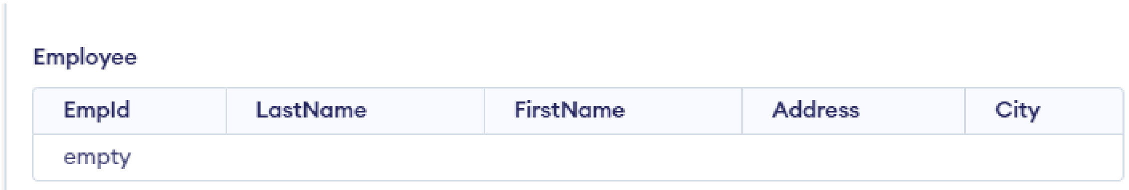
```
CREATE TABLE Employee(
    EmpId int,
    LastName varchar(255),
    FirstName varchar(255),
    Address varchar(255),
    City varchar(255)
);
```

SCREENSHOT:



```
-- Online SQL Editor to Run SQL Online.
-- Use the editor to create new tables, insert data and all other SQL operations.
CREATE TABLE Employee(
    EmpId int,
    LastName varchar(255),
    FirstName varchar(255),
    Address varchar(255),
    City varchar(255)
);
```

OUTPUT:



Employee

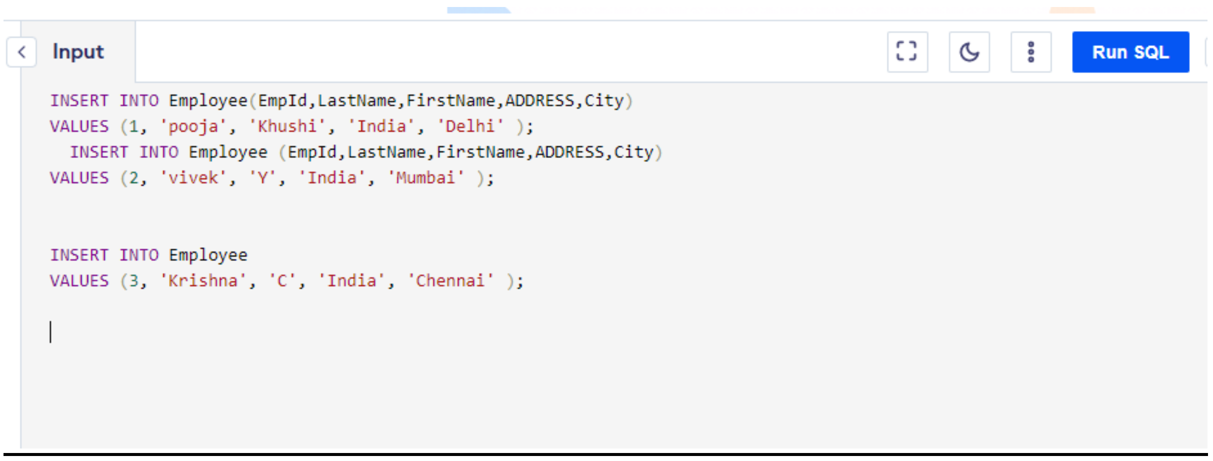
EmpId	LastName	FirstName	Address	City
empty				

Inserting Values in the table:

CODE:

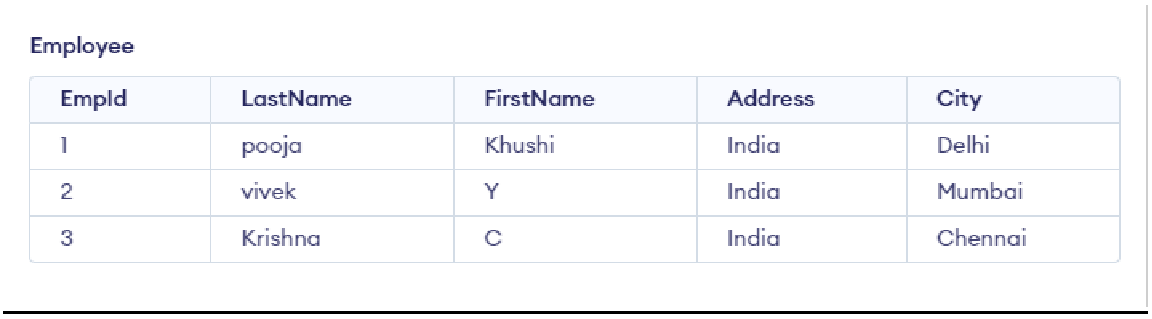
```
INSERT INTO Employee(EmpId,LastName,FirstName,ADDRESS,City)

VALUES (1, 'pooja', 'Khushi', 'India', 'Delhi' );

  INSERT INTO Employee (EmpId,LastName,FirstName,ADDRESS,City)

VALUES (2, 'vivek', 'Y', 'India', 'Mumbai' );



INSERT INTO Employee

VALUES (3, 'Krishna', 'C', 'India', 'Chennai' );
```

SCREENSHOT:



```
INSERT INTO Employee(EmpId,LastName,FirstName,ADDRESS,City)
VALUES (1, 'pooja', 'Khushi', 'India', 'Delhi' );
  INSERT INTO Employee (EmpId,LastName,FirstName,ADDRESS,City)
VALUES (2, 'vivek', 'Y', 'India', 'Mumbai' );


INSERT INTO Employee
VALUES (3, 'Krishna', 'C', 'India', 'Chennai' );
```

OUTPUT:



Employee

EmpId	LastName	FirstName	Address	City
1	pooja	Khushi	India	Delhi
2	vivek	Y	India	Mumbai
3	Krishna	C	India	Chennai

Updating a Table:

a) Updating single row:

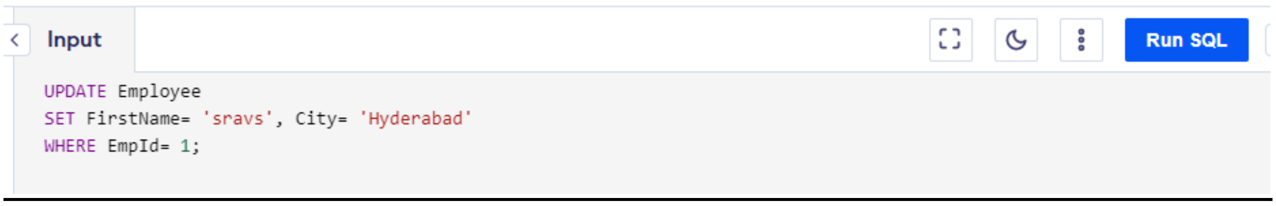
CODE:

UPDATE Employee

SET FirstName= 'sravs', City= 'Hyderabad'

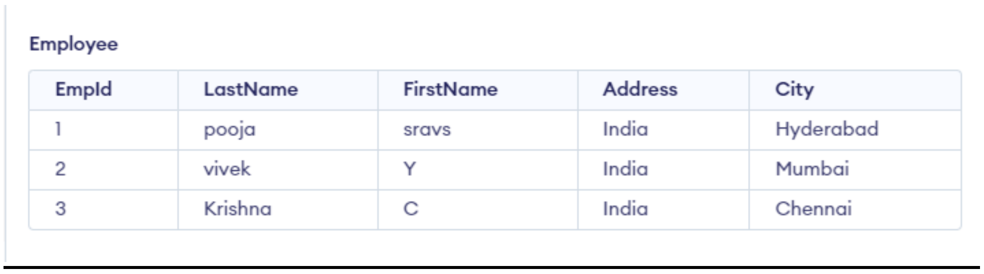
WHERE EmpId= 1;

SCREENSHOT:



```
UPDATE Employee
SET FirstName= 'sravs', City= 'Hyderabad'
WHERE EmpId= 1;
```

OUTPUT:



Employee

EmpId	LastName	FirstName	Address	City
1	pooja	sravs	India	Hyderabad
2	vivek	Y	India	Mumbai
3	Krishna	C	India	Chennai

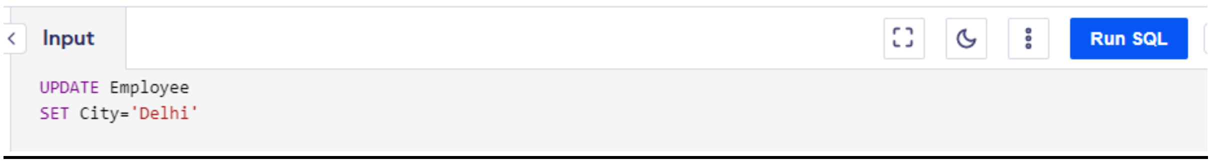
b) Updating multiple rows:

CODE:

UPDATE Employee

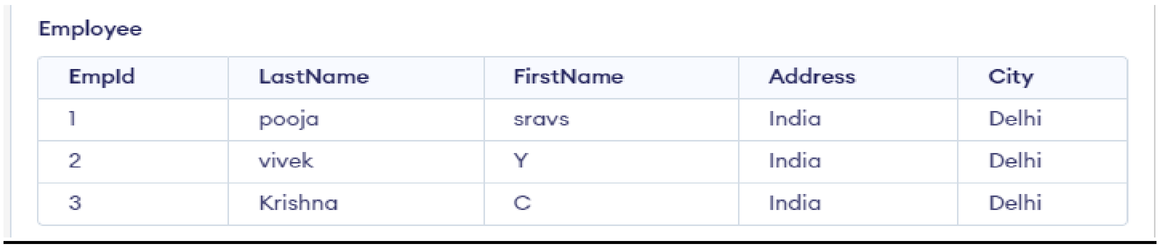
SET City='Delhi'

SCREENSHOT:



```
UPDATE Employee
SET City='Delhi'
```

OUTPUT:



Employee

EmpId	LastName	FirstName	Address	City
1	pooja	sravs	India	Delhi
2	vivek	Y	India	Delhi
3	Krishna	C	India	Delhi

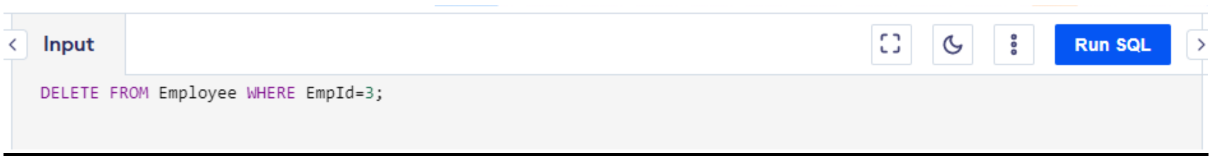
Deleting:

a) Deleting single row:

CODE:

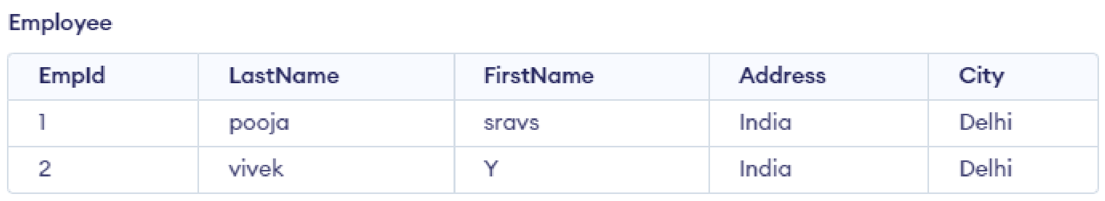
DELETE FROM Employee WHERE EmpId=3;

SCREENSHOT:



```
DELETE FROM Employee WHERE EmpId=3;
```

OUTPUT:



Employee

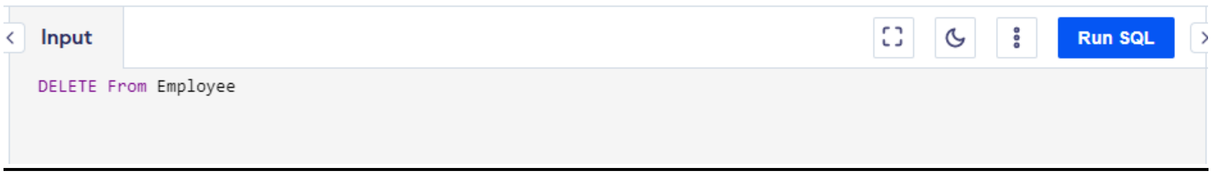
EmpId	LastName	FirstName	Address	City
1	pooja	sravs	India	Delhi
2	vivek	Y	India	Delhi

b) Deleting all records:

CODE:

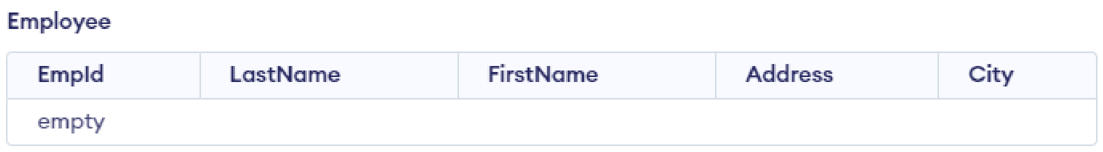
```
DELETE From Employee
```

SCREENSHOT:



```
DELETE From Employee
```

OUTPUT:


Employee

EmpId	LastName	FirstName	Address	City
empty				

>>

Creating tables and performing Joins:

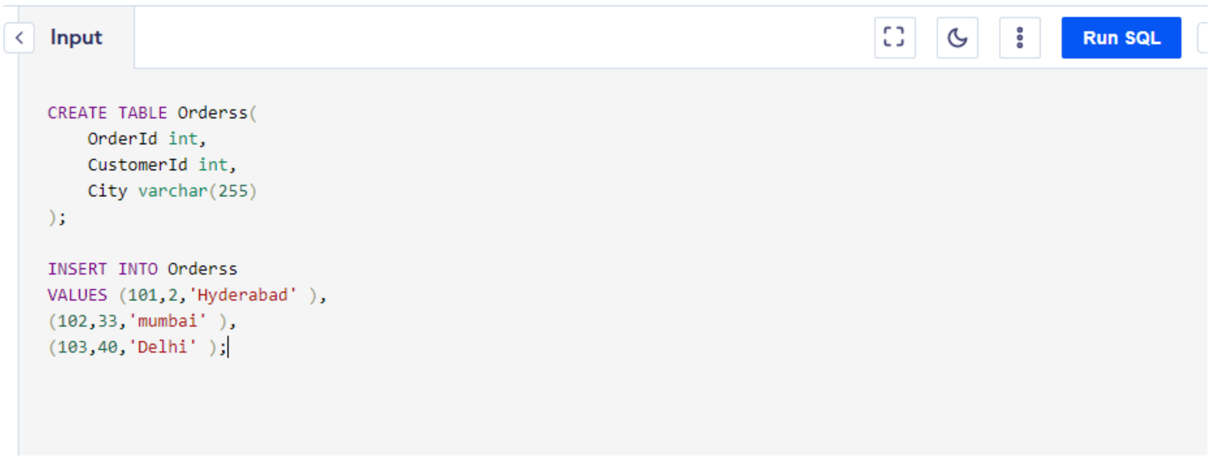
Creating a Tables:

TABLE 1:

CODE:

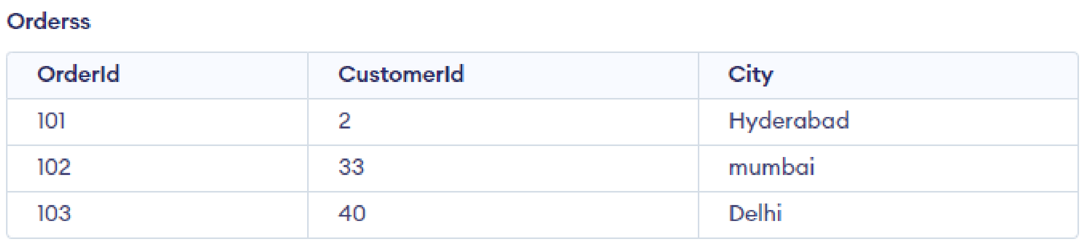
```
CREATE TABLE Orderss(
   OrderId int,
   CustomerId int,
   City varchar(255)
);

INSERT INTO Orderss
VALUES (101,2,'Hyderabad' ),
(102,33,'mumbai' ),
(103,40,'Delhi' );
```

SCREENSHOT:



```
CREATE TABLE Orderss(
    OrderId int,
    CustomerId int,
    City varchar(255)
);

INSERT INTO Orderss
VALUES (101,2,'Hyderabad' ),
(102,33,'mumbai' ),
(103,40,'Delhi' );
```

OUTPUT:



Orderss

OrderId	CustomerId	City
101	2	Hyderabad
102	33	mumbai
103	40	Delhi

TABLE 2:

CODE:

```
CREATE TABLE Customerss(
   CustomerId int,
   CustomerName varchar(255),
 LastName varchar(255),
 Country varchar(255)
);

INSERT INTO Customerss
```

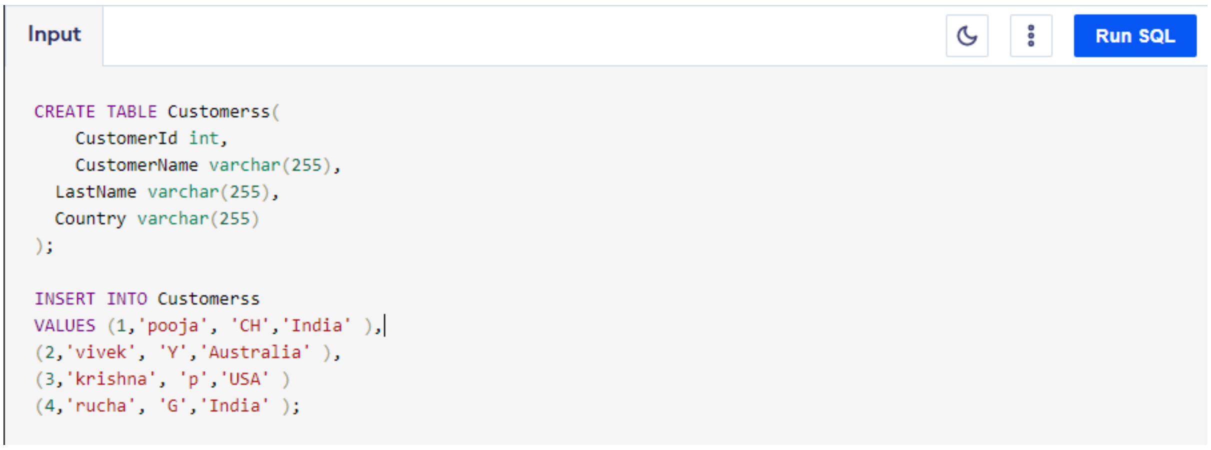
VALUES (1,'pooja', 'CH','India'),

(2,'vivek', 'Y','Australia'),

(3,'krishna', 'p','USA'),

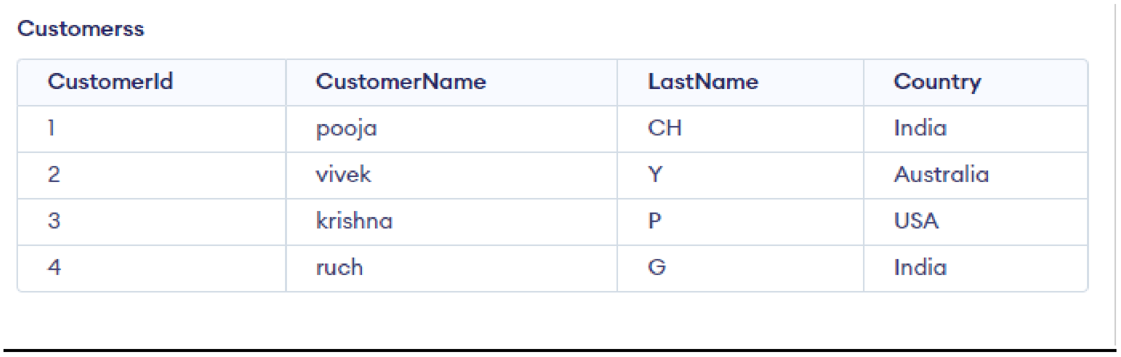
(4,'rucha', 'G','India');

SCREENSHOT:



```
CREATE TABLE Customerss(
    CustomerId int,
    CustomerName varchar(255),
  LastName varchar(255),
  Country varchar(255)
);

INSERT INTO Customerss
VALUES (1,'pooja', 'CH','India' ),
(2,'vivek', 'Y','Australia' ),
(3,'krishna', 'p','USA' )
(4,'rucha', 'G','India' );
```

OUTPUT:



Customerss

CustomerId	CustomerName	LastName	Country
1	pooja	CH	India
2	vivek	Y	Australia
3	krishna	P	USA
4	ruch	G	India

Performing Joins:

Inner Join:

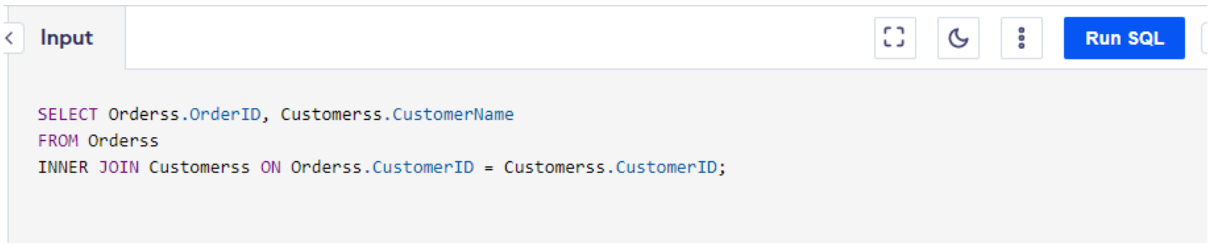
CODE:

SELECT Orderss.OrderID, Customerss.CustomerName

FROM Orderss

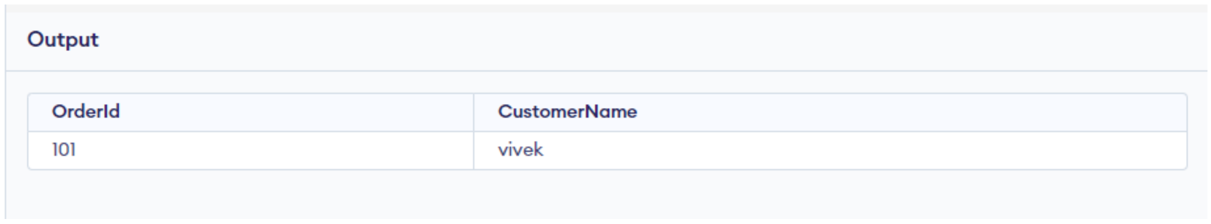
INNER JOIN Customerss ON Orderss.CustomerID = Customerss.CustomerID;

SCREENSHOT:



```
SELECT Orderss.OrderID, Customerss.CustomerName
FROM Orderss
INNER JOIN Customerss ON Orderss.CustomerID = Customerss.CustomerID;
```

OUTPUT:



OrderId	CustomerName
101	vivek

Left Join:

CODE:

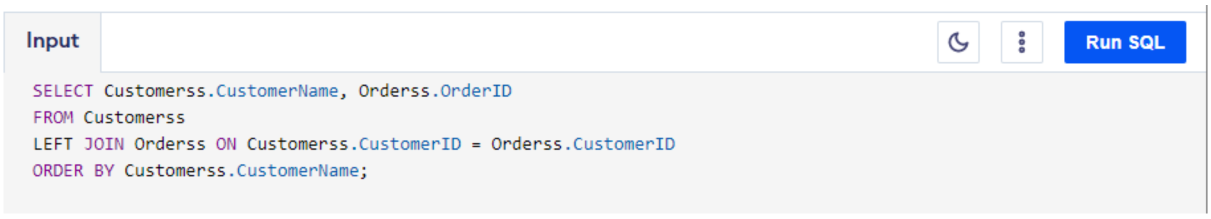
SELECT Customerss.CustomerName, Orderss.OrderID

FROM Customerss

LEFT JOIN Orderss ON Customerss.CustomerID = Orderss.CustomerID

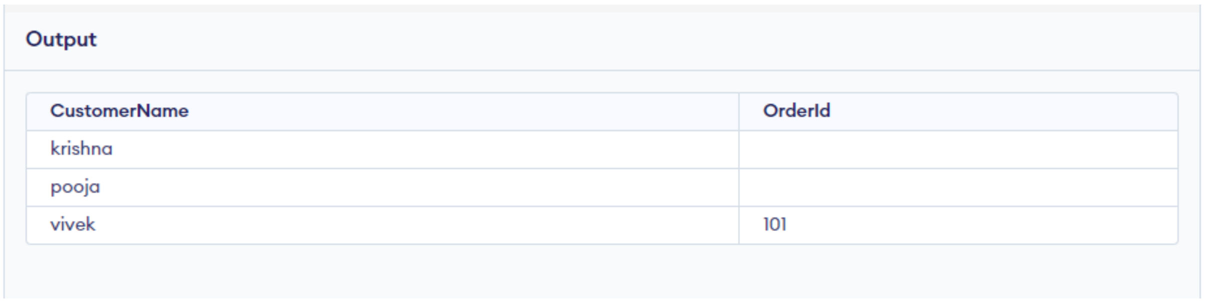
ORDER BY Customerss.CustomerName;

SCREENSHOT:



```
SELECT Customerss.CustomerName, Orderss.OrderID
FROM Customerss
LEFT JOIN Orderss ON Customerss.CustomerID = Orderss.CustomerID
ORDER BY Customerss.CustomerName;
```

OUTPUT:



Output

CustomerName	OrderId
krishna	
pooja	
vivek	101

Right Join:

CODE:

SELECT Orderss.CustomerId,Customerss.CustomerName,Customerss.LastName

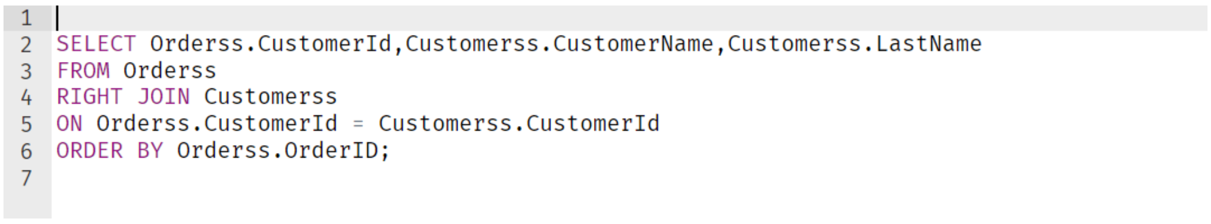
FROM Orderss

RIGHT JOIN Customerss

ON Orderss.CustomerId = Customerss.CustomerId

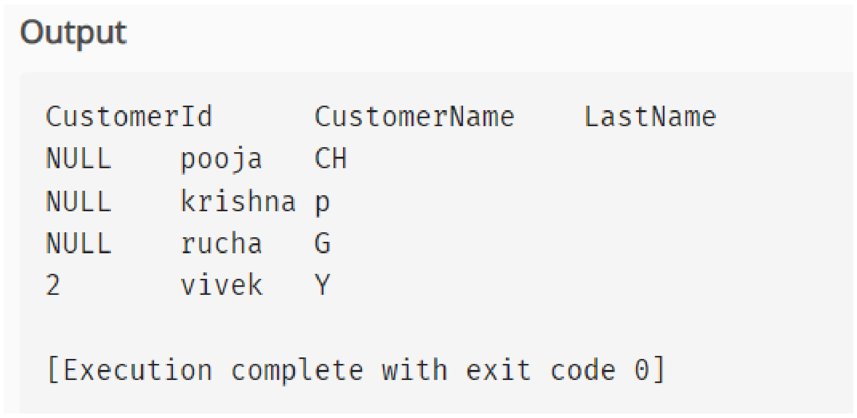
ORDER BY Orderss.OrderID;

SCREENSHOT:



```

SELECT Orderss.CustomerId,Customerss.CustomerName,Customerss.LastName
FROM Orderss
RIGHT JOIN Customerss
ON Orderss.CustomerId = Customerss.CustomerId
ORDER BY Orderss.OrderID;

```

OUTPUT:



Output

```
CustomerId       CustomerName     LastName
NULL     pooja    CH
NULL     krishna p
NULL     rucha    G
2        vivek    Y

[Execution complete with exit code 0]
```

Full outer Join:

CODE:

SELECT Customerss.CustomerName, Orderss.OrderID

FROM Customerss

LEFT JOIN Orderss ON Customerss.CustomerID = Orderss.CustomerID

ORDER BY Customerss.CustomerName;

UNION

SELECT Orderss.CustomerId,Customerss.CustomerName,Customerss.LastName

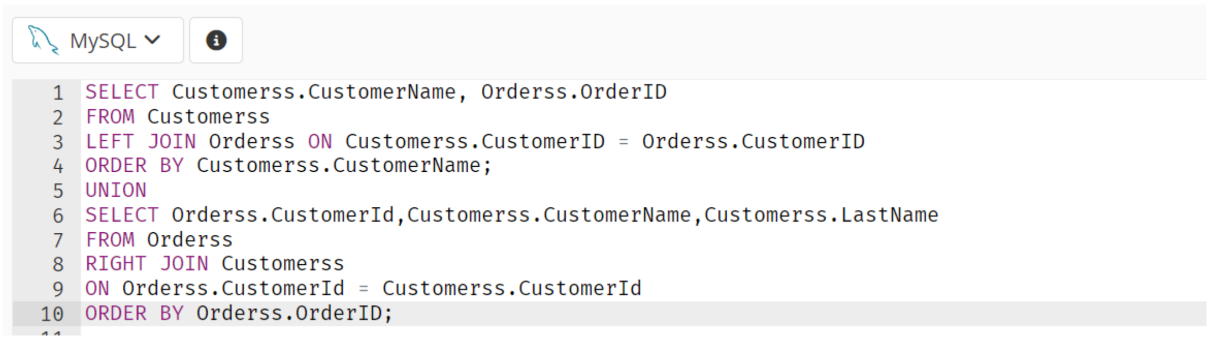
FROM Orderss

RIGHT JOIN Customerss

ON Orderss.CustomerId = Customerss.CustomerId

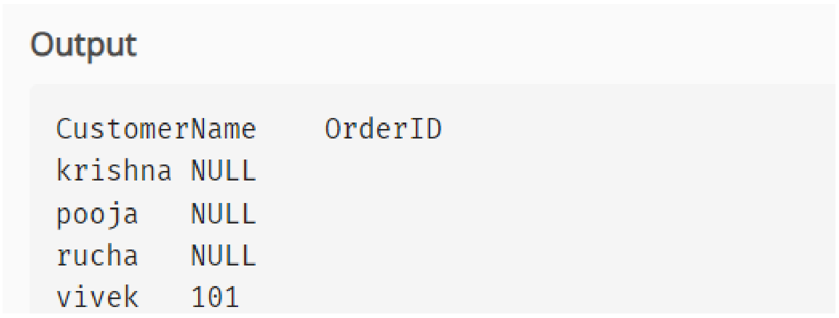
ORDER BY Orderss.OrderID;

SCREENSHOT:



```
SELECT Customerss.CustomerName, Orderss.OrderID
FROM Customerss
LEFT JOIN Orderss ON Customerss.CustomerID = Orderss.CustomerID
ORDER BY Customerss.CustomerName;
UNION
SELECT Orderss.CustomerId,Customerss.CustomerName,Customerss.LastName
FROM Orderss
RIGHT JOIN Customerss
ON Orderss.CustomerId = Customerss.CustomerId
ORDER BY Orderss.OrderID;
```

OUTPUT:



Output

```
CustomerName    OrderID
krishna NULL
pooja   NULL
rucha   NULL
vivek   101
```

Cross Join:

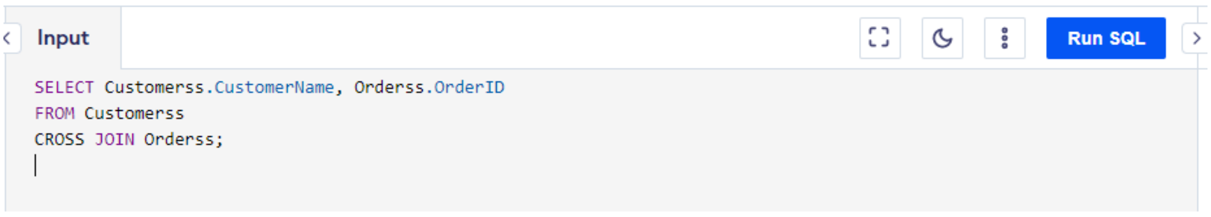
CODE:

SELECT Customerss.CustomerName, Orderss.OrderID

FROM Customerss

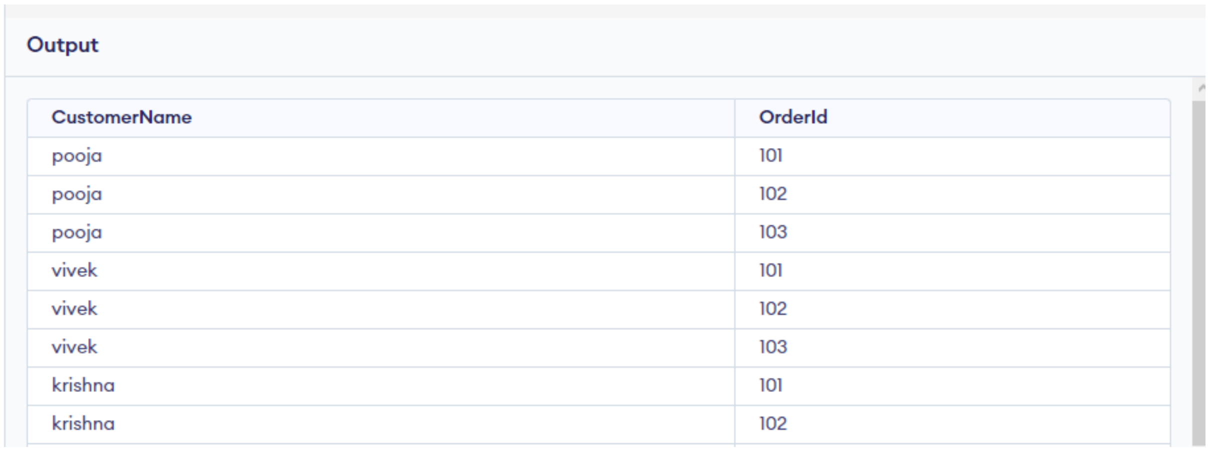
CROSS JOIN Orderss;

SCREENSHOT:



```
SELECT Customerss.CustomerName, Orderss.OrderID
FROM Customerss
CROSS JOIN Orderss;
```

OUTPUT:



CustomerName	OrderId
pooja	101
pooja	102
pooja	103
vivek	101
vivek	102
vivek	103
krishna	101
krishna	102

Self Join:

SELECT A.CustomerName AS C1, B.CustomerName AS C2

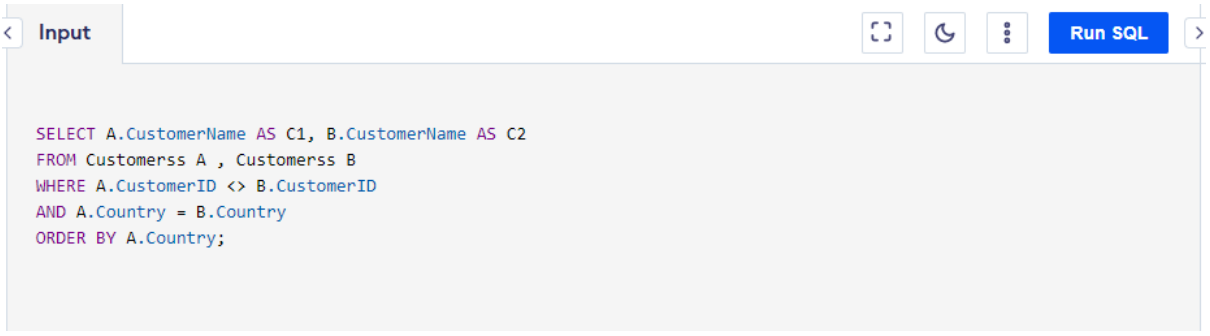
FROM Customerss A , Customerss B

WHERE A.CustomerID <> B.CustomerID

AND A.Country = B.Country

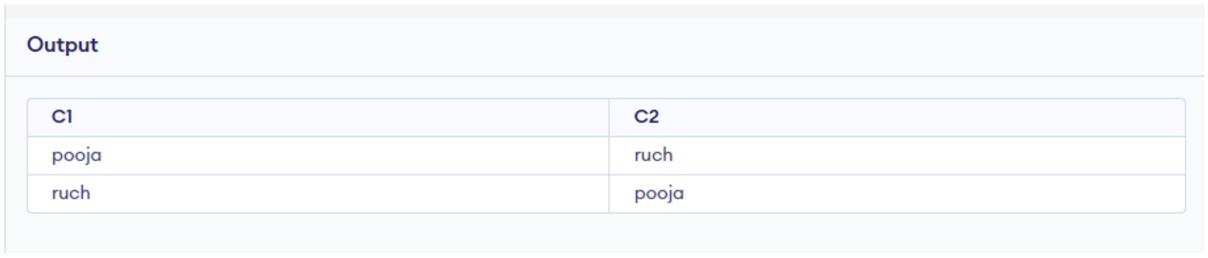
ORDER BY A.Country;

SCREENSHOT:



```
SELECT A.CustomerName AS C1, B.CustomerName AS C2
FROM Customerss A , Customerss B
WHERE A.CustomerID <> B.CustomerID
AND A.Country = B.Country
ORDER BY A.Country;
```

OUTPUT:



C1	C2
pooja	ruch
ruch	pooja

>>

MongoDB:

CREATING AND INSERTING:

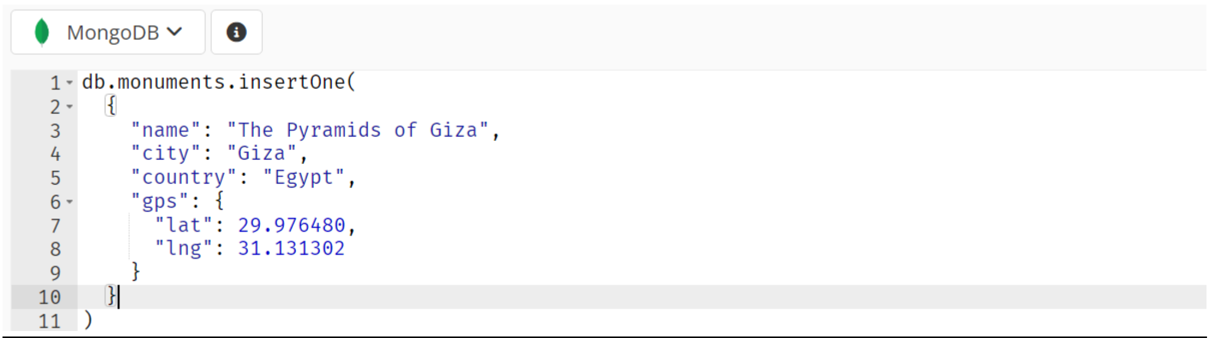
a) Inserting one document:

CODE:

```
db.monuments.insertOne(
 {
  "name": "The Pyramids of Giza",
  "city": "Giza",
  "country": "Egypt",
  "gps": {
   "lat": 29.976480,
   "lng": 31.131302
  }
 }
```

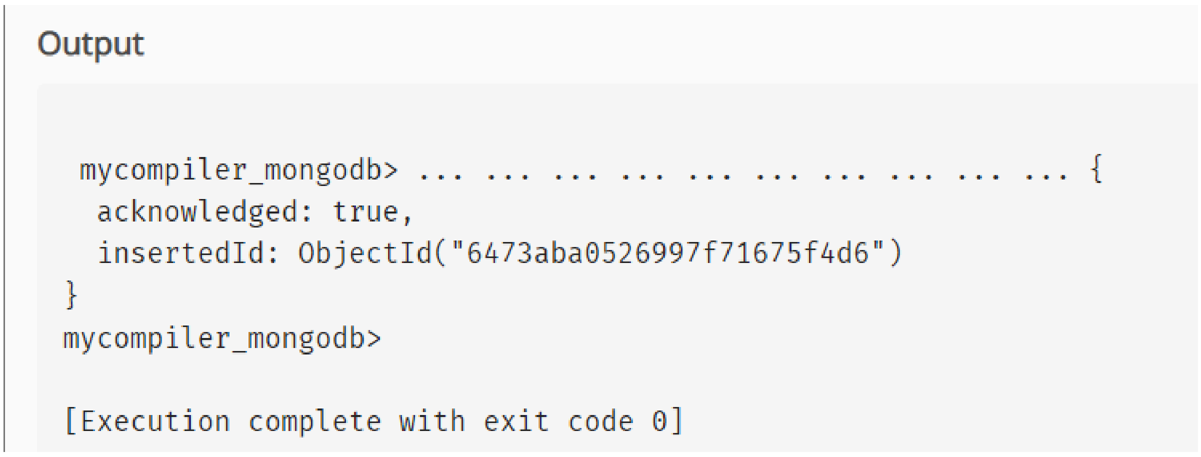
)

SCREENSHOT:



```
db.monuments.insertOne(
  {
    "name": "The Pyramids of Giza",
    "city": "Giza",
    "country": "Egypt",
    "gps": {
      "lat": 29.976480,
      "lng": 31.131302
    }
  }
)
```

OUTPUT:



Output

```
 mycompiler_mongodb> ... ... ... ... ... ... ... ... ... ... {
  acknowledged: true,
  insertedId: ObjectId("6473aba0526997f71675f4d6")
}
mycompiler_mongodb>

[Execution complete with exit code 0]
```

b) Inserting Many:

CODE:

db.monuments.insertMany([

{"name": "The Valley of the Kings", "city": "Luxor", "country": "Egypt", "gps": { "lat": 25.746424, "lng": 32.605309 }},

{"name": "Arc de Triomphe", "city": "Paris", "country": "France", "gps": { "lat": 48.873756, "lng": 2.294946 }},

{"name": "The Eiffel Tower", "city": "Paris", "country": "France", "gps": { "lat": 48.858093, "lng": 2.294694 }},

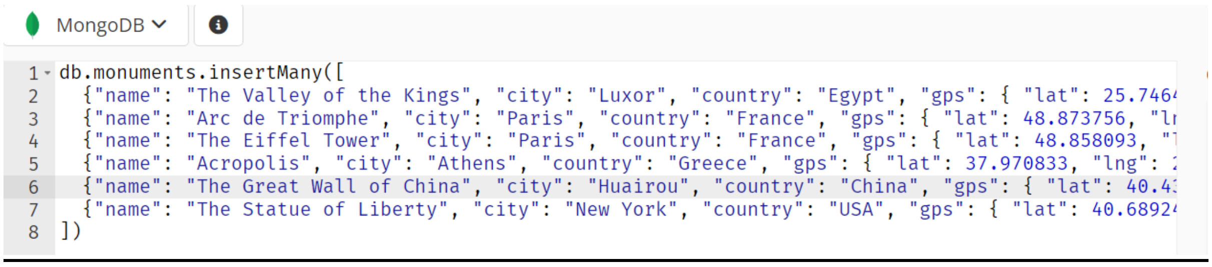
{"name": "Acropolis", "city": "Athens", "country": "Greece", "gps": { "lat": 37.970833, "lng": 23.726110 }},

{"name": "The Great Wall of China", "city": "Huairou", "country": "China", "gps": { "lat": 40.431908, "lng": 116.570374 }},

{"name": "The Statue of Liberty", "city": "New York", "country": "USA", "gps": { "lat": 40.689247, "lng": -74.044502 }}

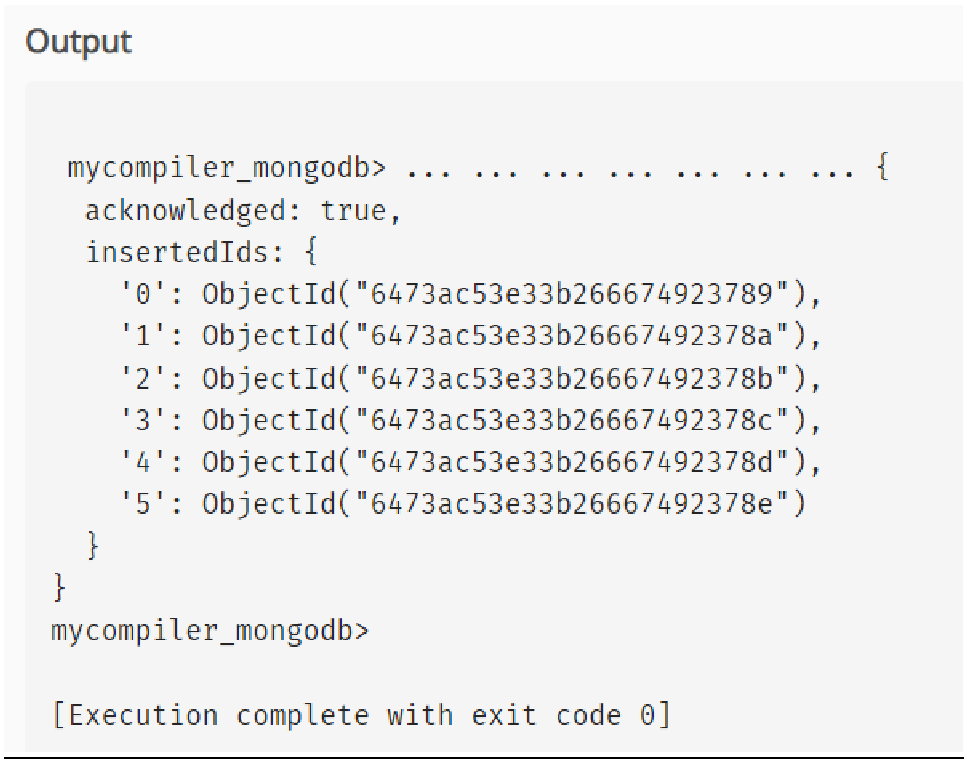
])

SCREENSHOT:



```
db.monuments.insertMany([
  {"name": "The Valley of the Kings", "city": "Luxor", "country": "Egypt", "gps": { "lat": 25.7464
  {"name": "Arc de Triomphe", "city": "Paris", "country": "France", "gps": { "lat": 48.873756, "ln
  {"name": "The Eiffel Tower", "city": "Paris", "country": "France", "gps": { "lat": 48.858093, "l
  {"name": "Acropolis", "city": "Athens", "country": "Greece", "gps": { "lat": 37.970833, "lng": 2
  {"name": "The Great Wall of China", "city": "Huairou", "country": "China", "gps": { "lat": 40.43
  {"name": "The Statue of Liberty", "city": "New York", "country": "USA", "gps": { "lat": 40.68924
])
```

OUTPUT:



```
 mycompiler_mongodb> ... ... ... ... ... ... ... {
  acknowledged: true,
  insertedIds: {
    '0': ObjectId("6473ac53e33b266674923789"),
    '1': ObjectId("6473ac53e33b26667492378a"),
    '2': ObjectId("6473ac53e33b26667492378b"),
    '3': ObjectId("6473ac53e33b26667492378c"),
    '4': ObjectId("6473ac53e33b26667492378d"),
    '5': ObjectId("6473ac53e33b26667492378e")
  }
}
mycompiler_mongodb>

[Execution complete with exit code 0]
```

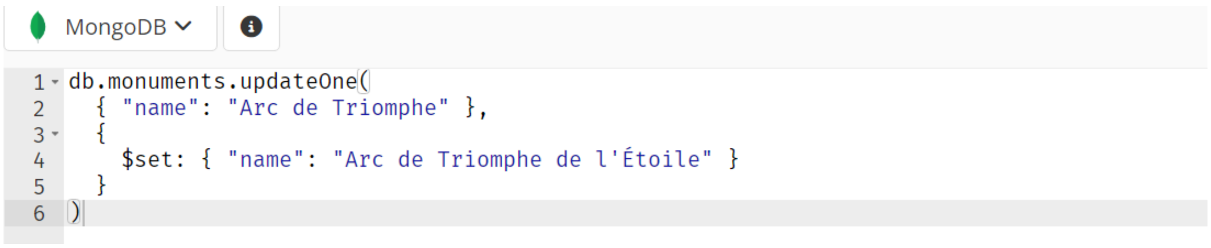
UPDATING:

a) Single document:

CODE:

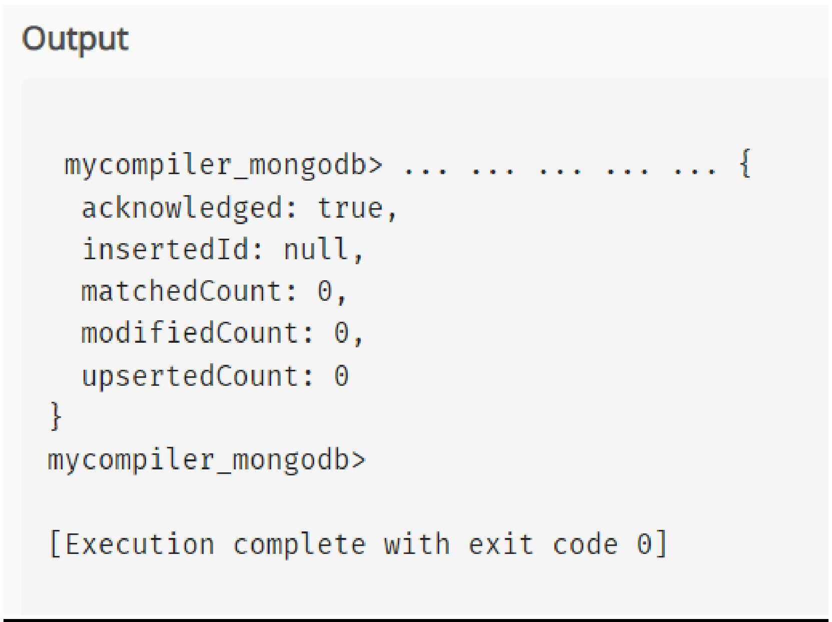
```
db.monuments.updateOne(
 { "name": "Arc de Triomphe" },
 {
  $set: { "name": "Arc de Triomphe de l'Étoile" }
 }
)
```

SCREENSHOT:



```
db.monuments.updateOne(
  { "name": "Arc de Triomphe" },
  {
    $set: { "name": "Arc de Triomphe de l'Étoile" }
  }
)
```

OUTPUT:



Output

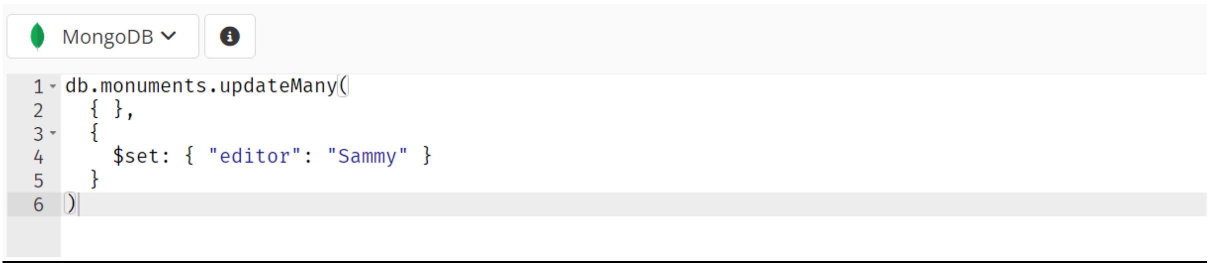
```
 mycompiler_mongodb> ... ... ... ... ... {
   acknowledged: true,
   insertedId: null,
   matchedCount: 0,
   modifiedCount: 0,
   upsertedCount: 0
 }
mycompiler_mongodb>

[Execution complete with exit code 0]
```

b) Updating many:

CODE:

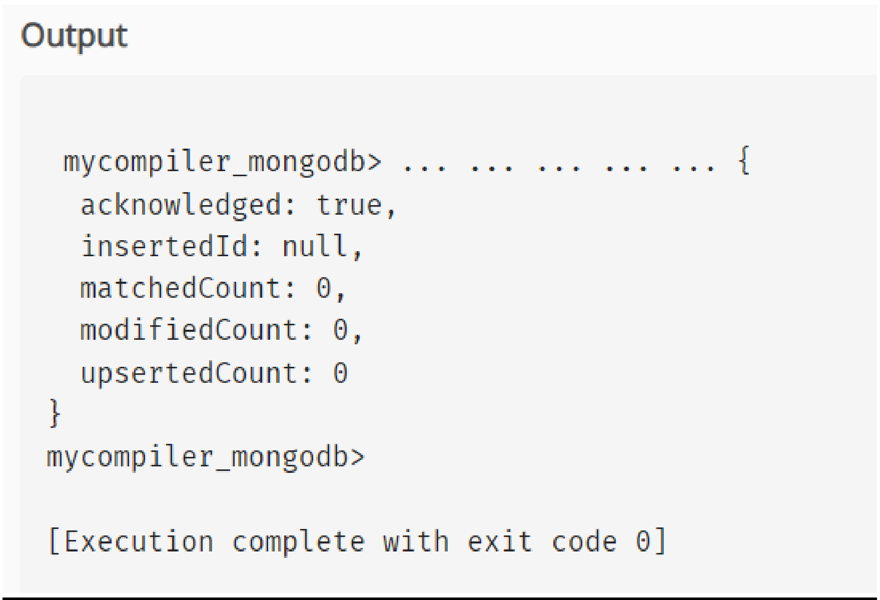
```
db.monuments.updateMany(
 { },
 {
  $set: { "editor": "Sammy" }
 }
)
```

SCREENSHOT:



```
db.monuments.updateMany(
  { },
  {
    $set: { "editor": "Sammy" }
  }
)
```

OUTPUT:



```
 mycompiler_mongodb> ... ... ... ... ... {
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
mycompiler_mongodb>

[Execution complete with exit code 0]
```

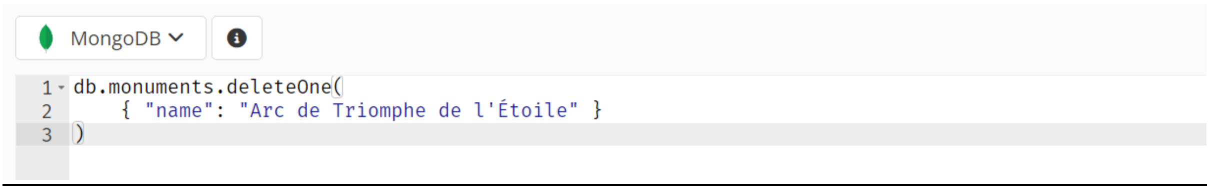
Deleting:

a) Deleting one document:

CODE:

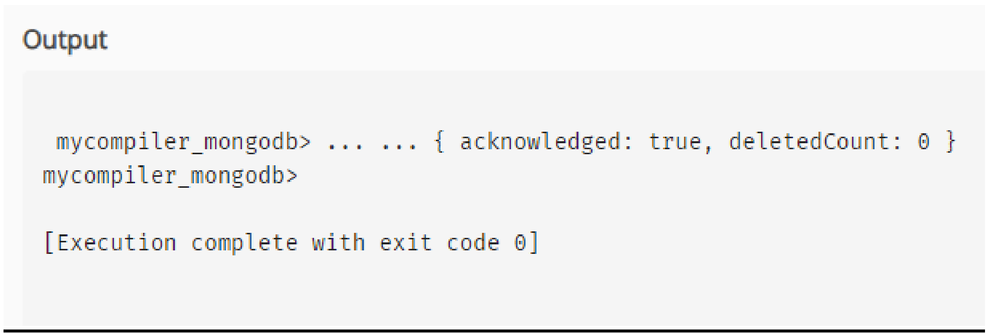
```
db.monuments.deleteOne(
  { "name": "Arc de Triomphe de l'Étoile" }
)
```

SCREENSHOT:



```
db.monuments.deleteOne(
    { "name": "Arc de Triomphe de l'Étoile" }
)
```

OUTPUT:



Output

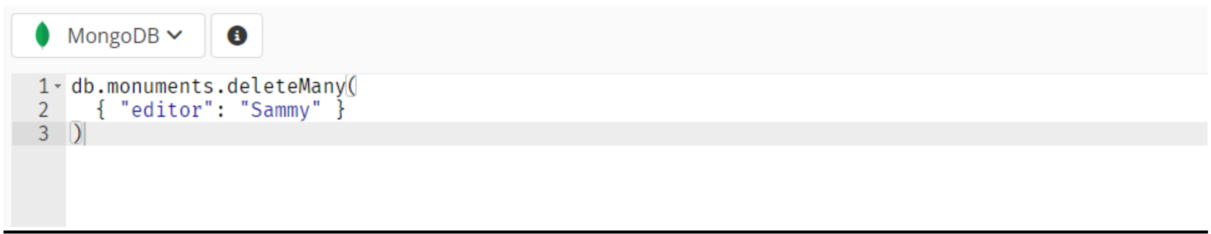
```
 mycompiler_mongodb> ... ... { acknowledged: true, deletedCount: 0 }
mycompiler_mongodb>

[Execution complete with exit code 0]
```

b) Deleting many:

CODE:

```
db.monuments.deleteMany(
 { "editor": "Sammy" }
)
```

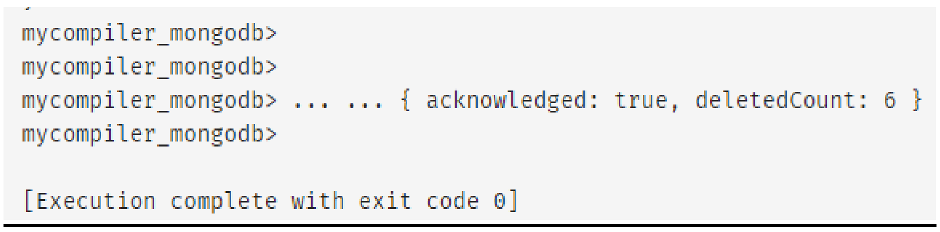
SCREENSHOT:



MongoDB

```
db.monuments.deleteMany(
  { "editor": "Sammy" }
)
```

OUTPUT:



```
mycompiler_mongodb>
mycompiler_mongodb>
mycompiler_mongodb> ... ... { acknowledged: true, deletedCount: 6 }
mycompiler_mongodb>

[Execution complete with exit code 0]
```