PROGRAM 2

Consider the following database for a banking enterprise.

BRANCH (branch-name: String, branch-city: String, assets: real)

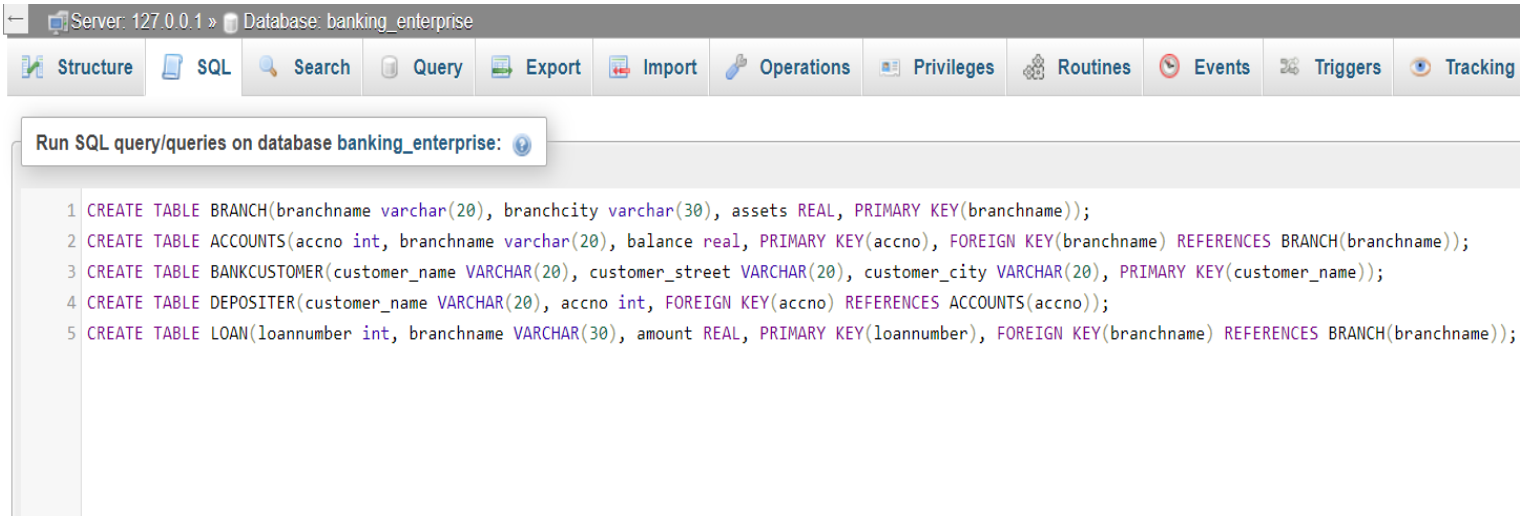
ACCOUNTS (accno: int, branch-name: String, balance: real)

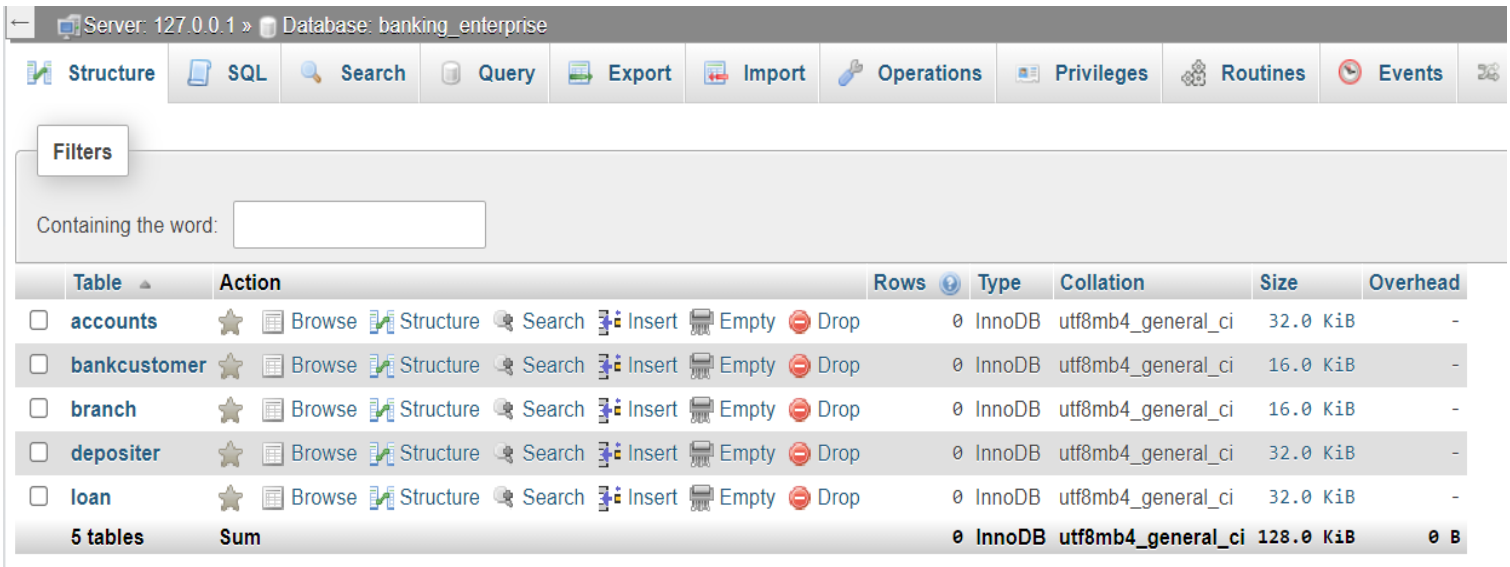
BANKCUSTOMER (customer-name: String, customer-street: String, customer-city: String)

DEPOSITER (customer-name: String, accno: int)

LOAN (loan-number: int, branch-name: String, amount: real)

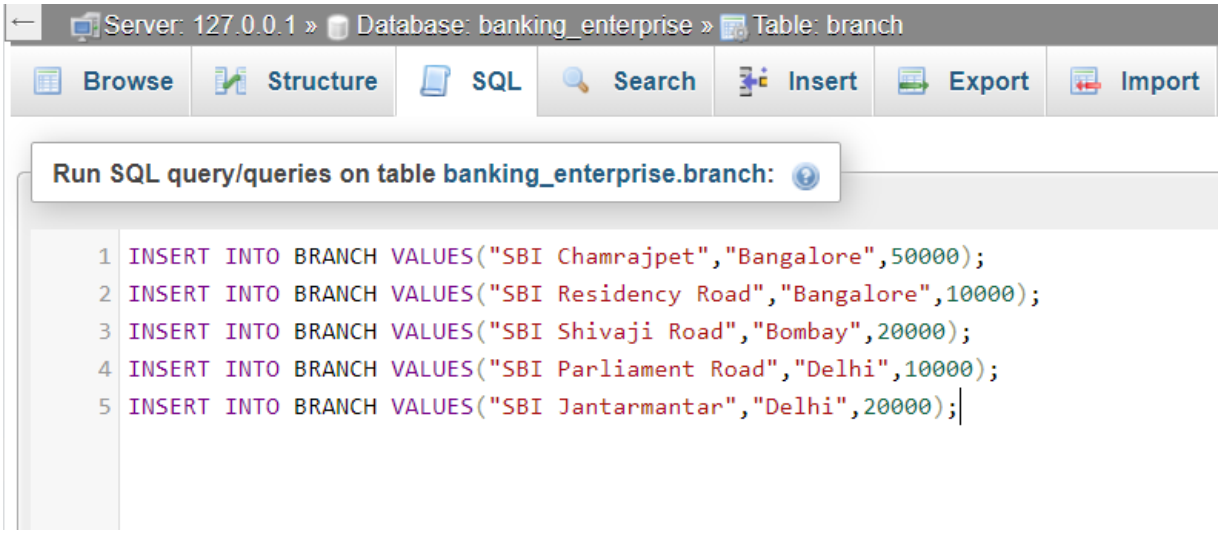
1) **Create the above tables by properly specifying the primary keys and the foreign keys.**

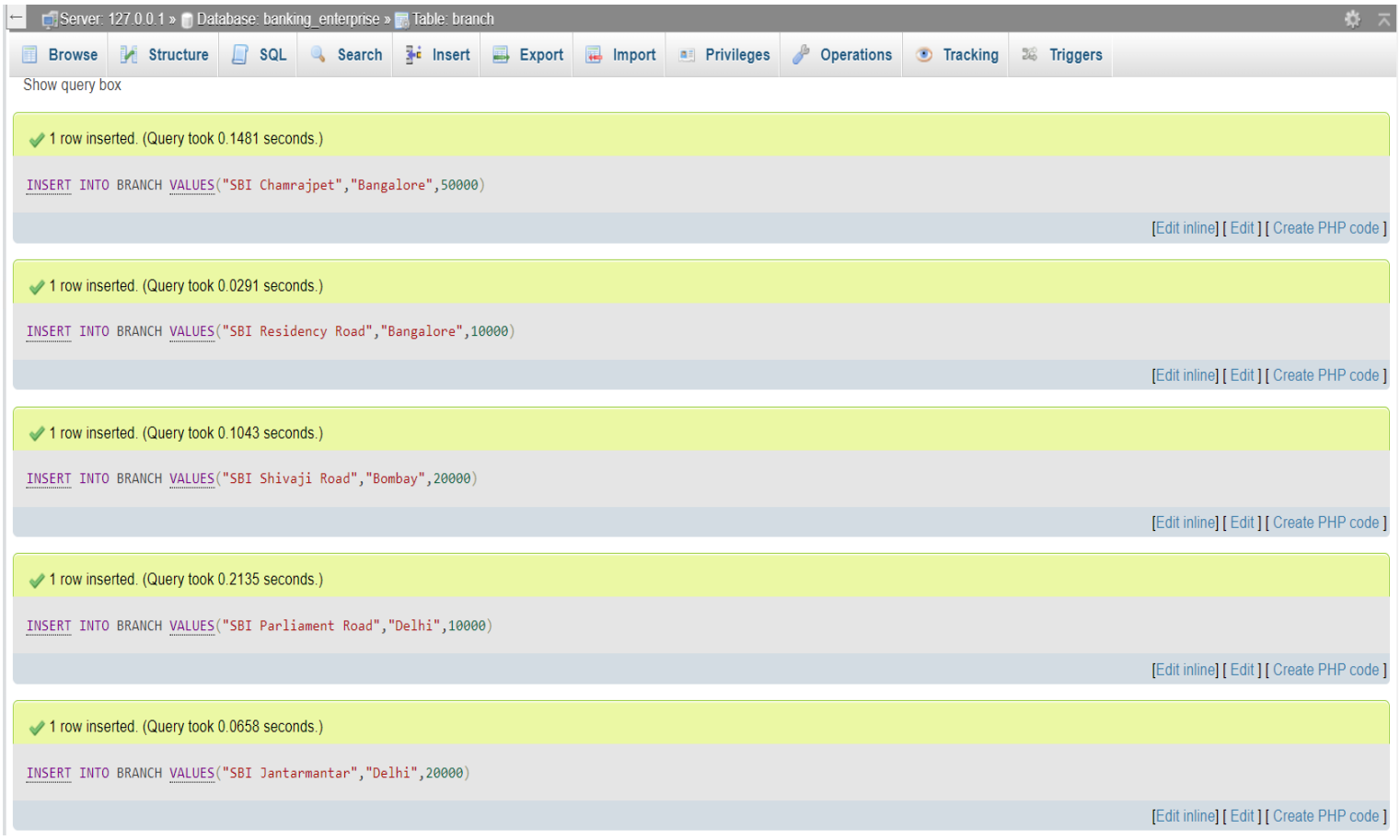


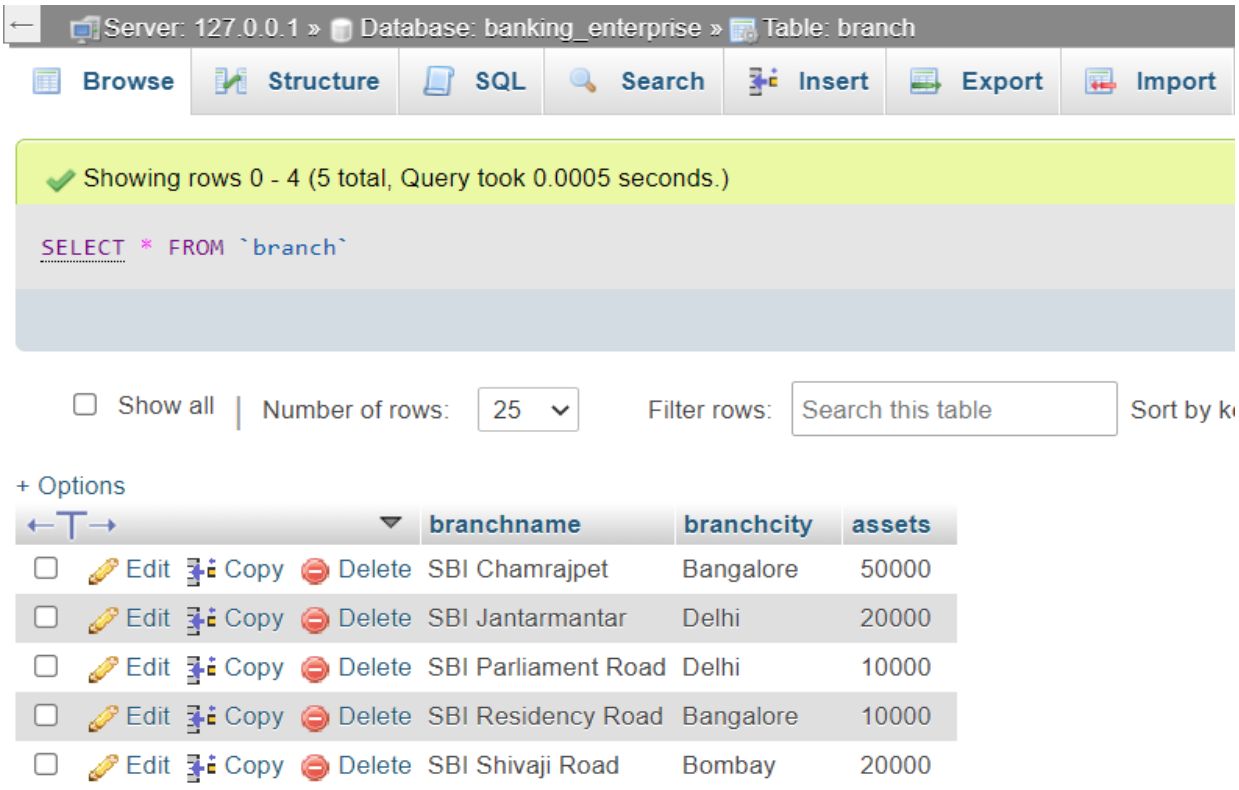


2) Enter at least 5 tuples for each relation.

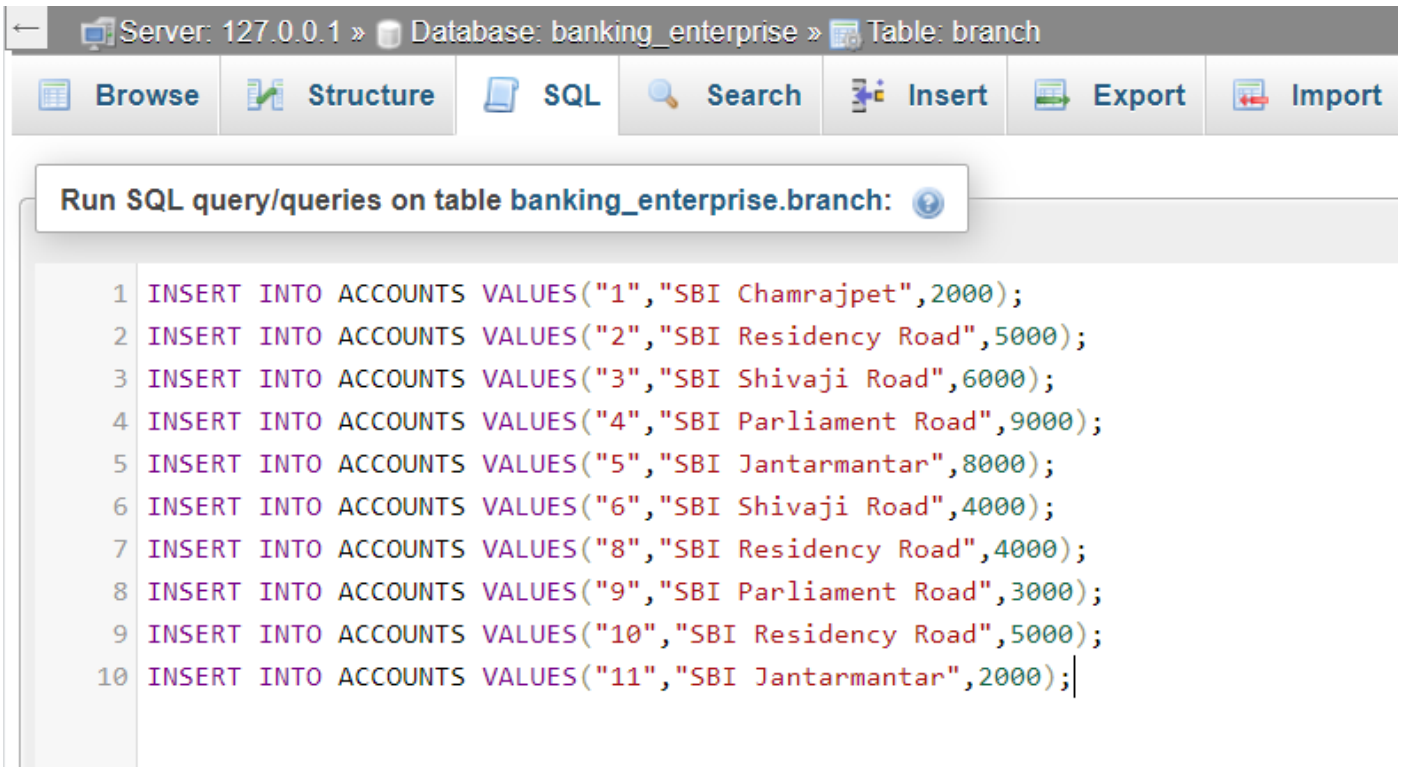
'BRANCH' table:







'ACCOUNTS' table:



Server: 127.0.0.1 » Database: banking_enterprise » Table: branch

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Tracking | Triggers

1 row inserted. (Query took 0.1276 seconds.)

```
INSERT INTO ACCOUNTS VALUES("1","SBI Chamrajpet",2000)
```

[Edit inline] [Edit] [Create PHP code]

1 row inserted. (Query took 0.0638 seconds.)

```
INSERT INTO ACCOUNTS VALUES("2","SBI Residency Road",5000)
```

[Edit inline] [Edit] [Create PHP code]

1 row inserted. (Query took 0.2065 seconds.)

```
INSERT INTO ACCOUNTS VALUES("3","SBI Shivaji Road",6000)
```

[Edit inline] [Edit] [Create PHP code]

1 row inserted. (Query took 0.0454 seconds.)

```
INSERT INTO ACCOUNTS VALUES("4","SBI Parliament Road",9000)
```

[Edit inline] [Edit] [Create PHP code]

1 row inserted. (Query took 0.0453 seconds.)

```
INSERT INTO ACCOUNTS VALUES("5","SBI Jantarmantar",8000)
```

[Edit inline] [Edit] [Create PHP code]

Server: 127.0.0.1 » Database: banking_enterprise » Table: branch

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Tracking | Triggers

[Edit inline] [Edit] [Create PHP code]

1 row inserted. (Query took 0.0322 seconds.)

```
INSERT INTO ACCOUNTS VALUES("6","SBI Shivaji Road",4000)
```

[Edit inline] [Edit] [Create PHP code]

1 row inserted. (Query took 0.0319 seconds.)

```
INSERT INTO ACCOUNTS VALUES("8","SBI Residency Road",4000)
```

[Edit inline] [Edit] [Create PHP code]

1 row inserted. (Query took 0.0313 seconds.)

```
INSERT INTO ACCOUNTS VALUES("9","SBI Parliament Road",3000)
```

[Edit inline] [Edit] [Create PHP code]

1 row inserted. (Query took 0.0324 seconds.)

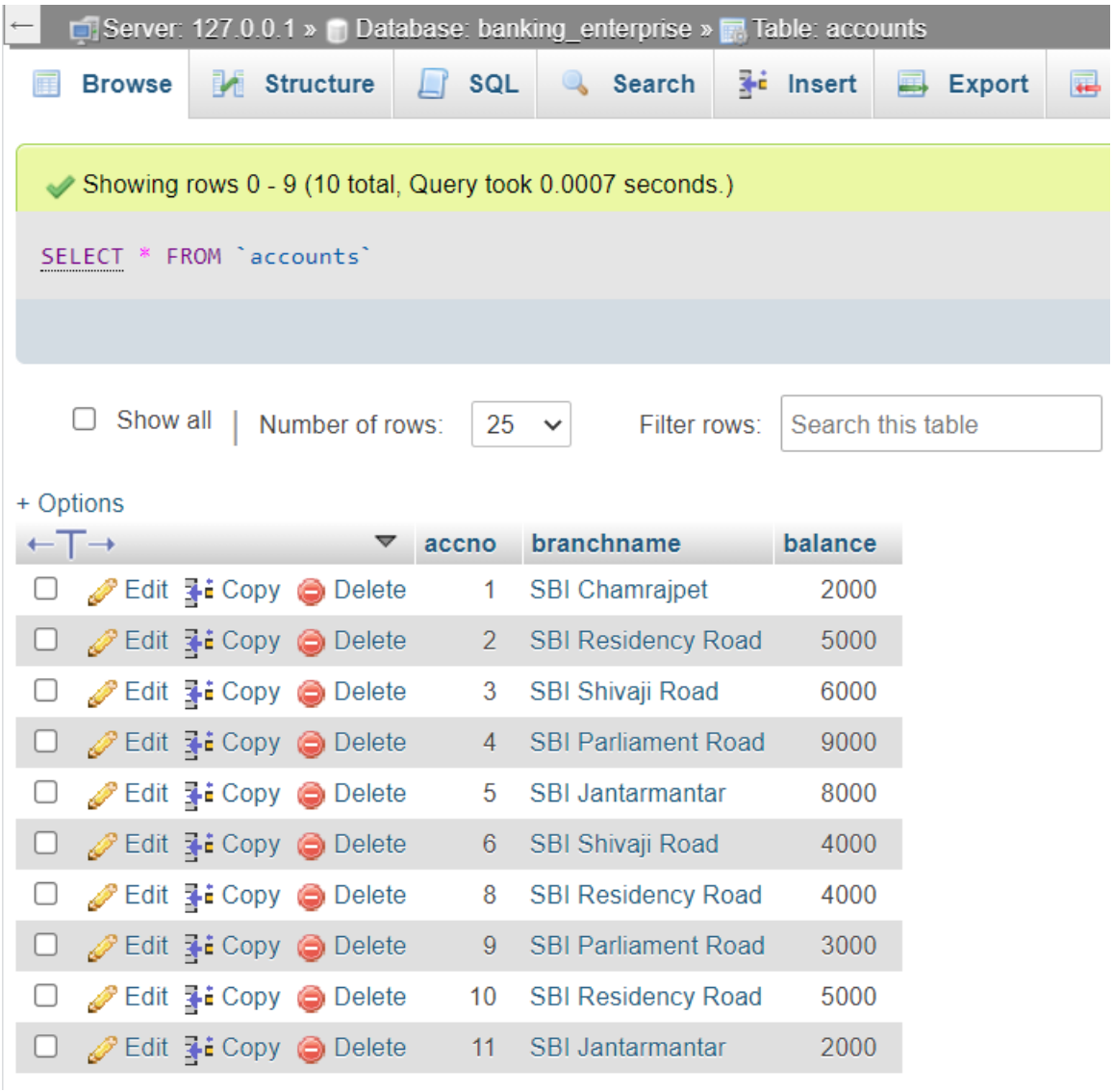
```
INSERT INTO ACCOUNTS VALUES("10","SBI Residency Road",5000)
```

[Edit inline] [Edit] [Create PHP code]

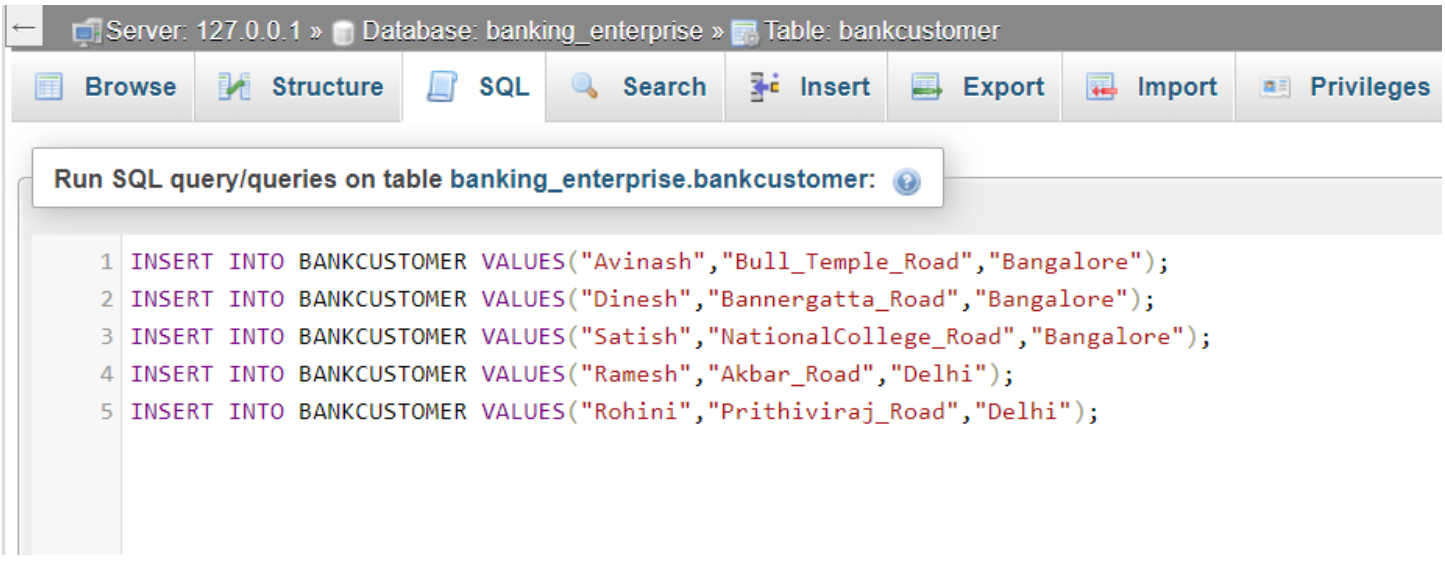
1 row inserted. (Query took 0.0325 seconds.)

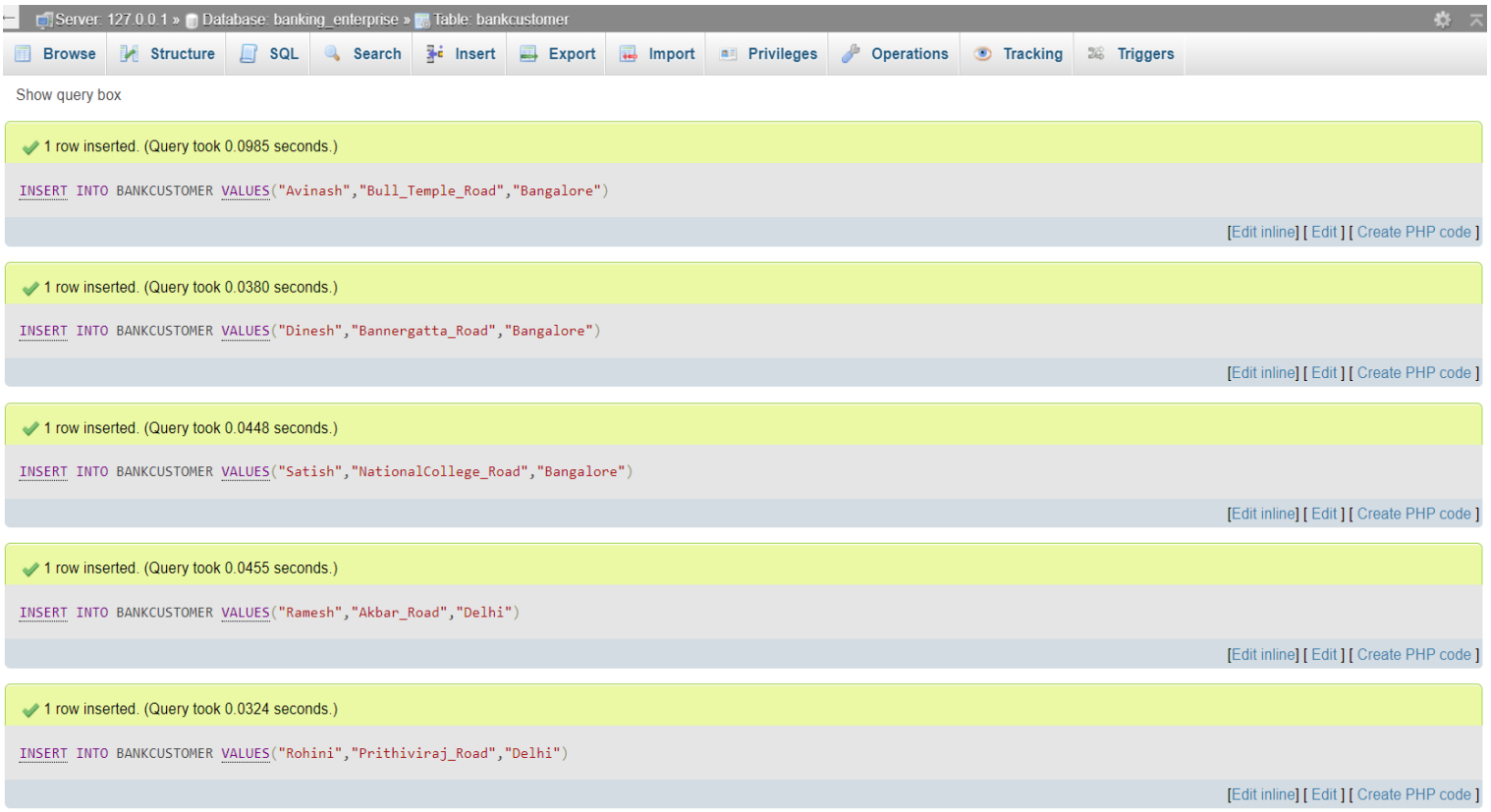
```
INSERT INTO ACCOUNTS VALUES("11","SBI Jantarmantar",2000)
```

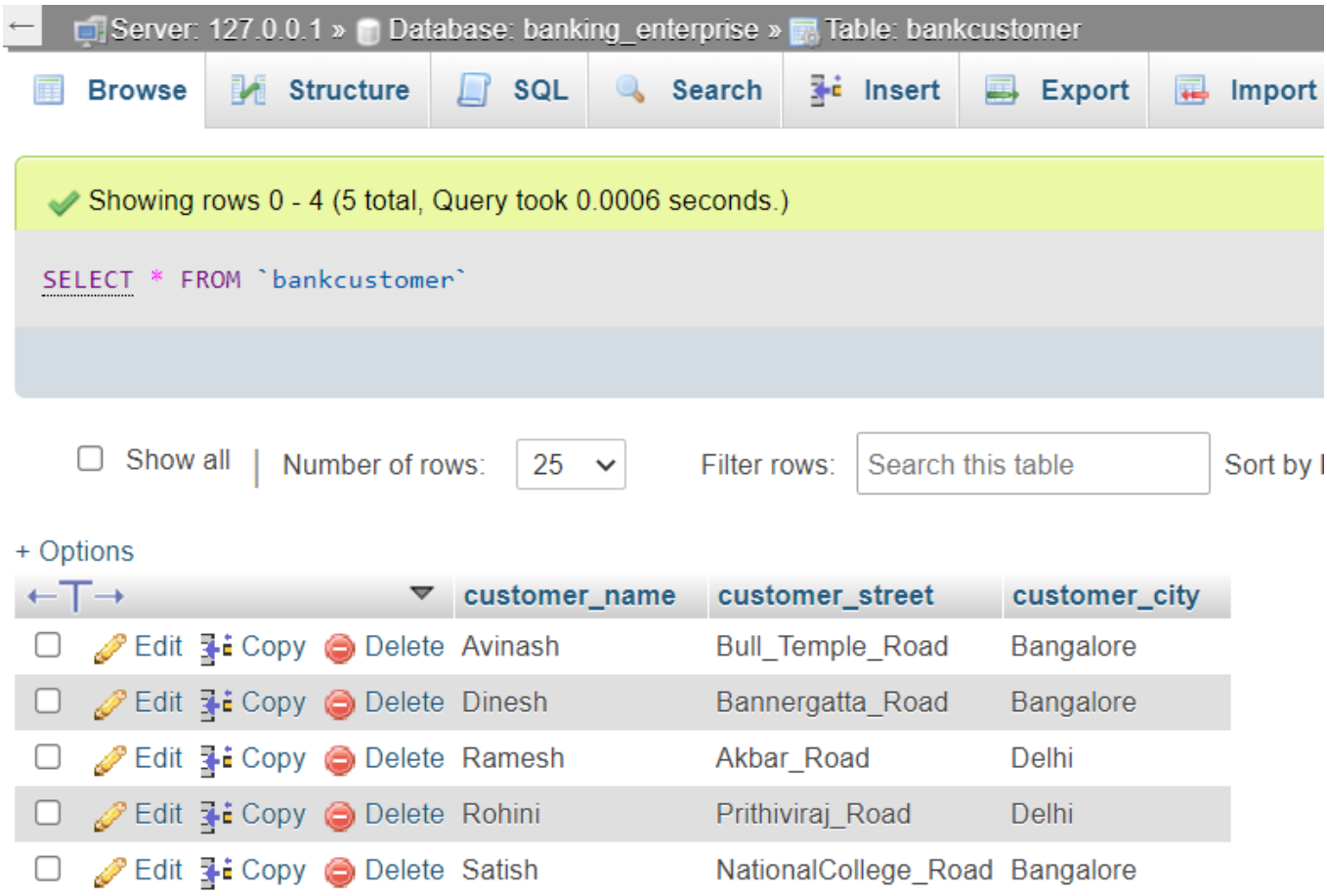
[Edit inline] [Edit] [Create PHP code]



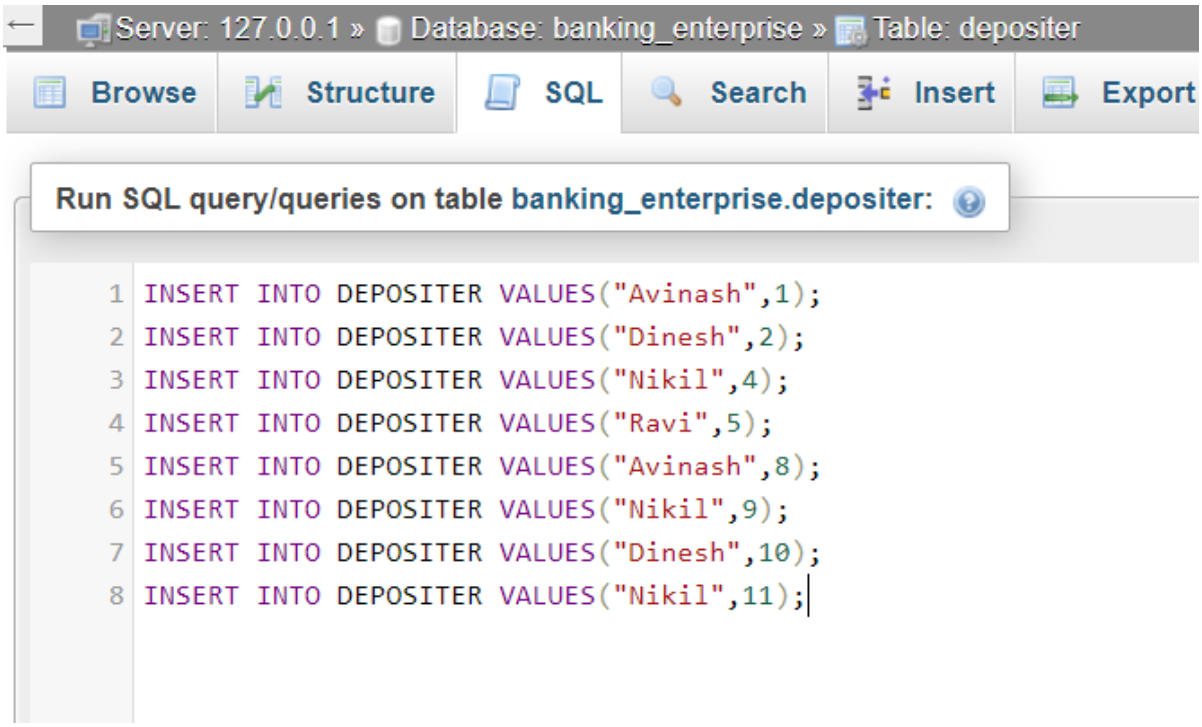
'BANKCUSTOMER' table:

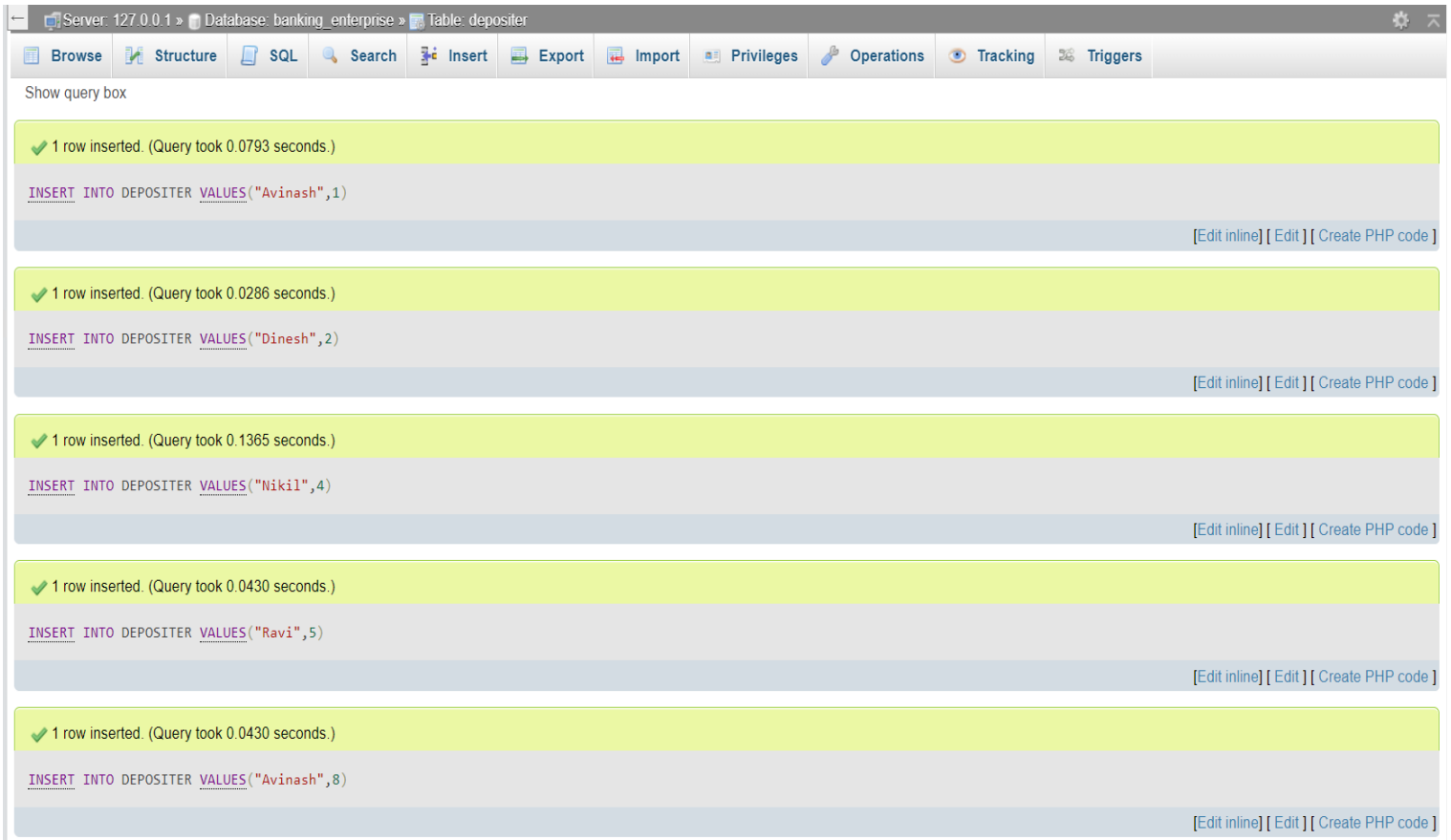


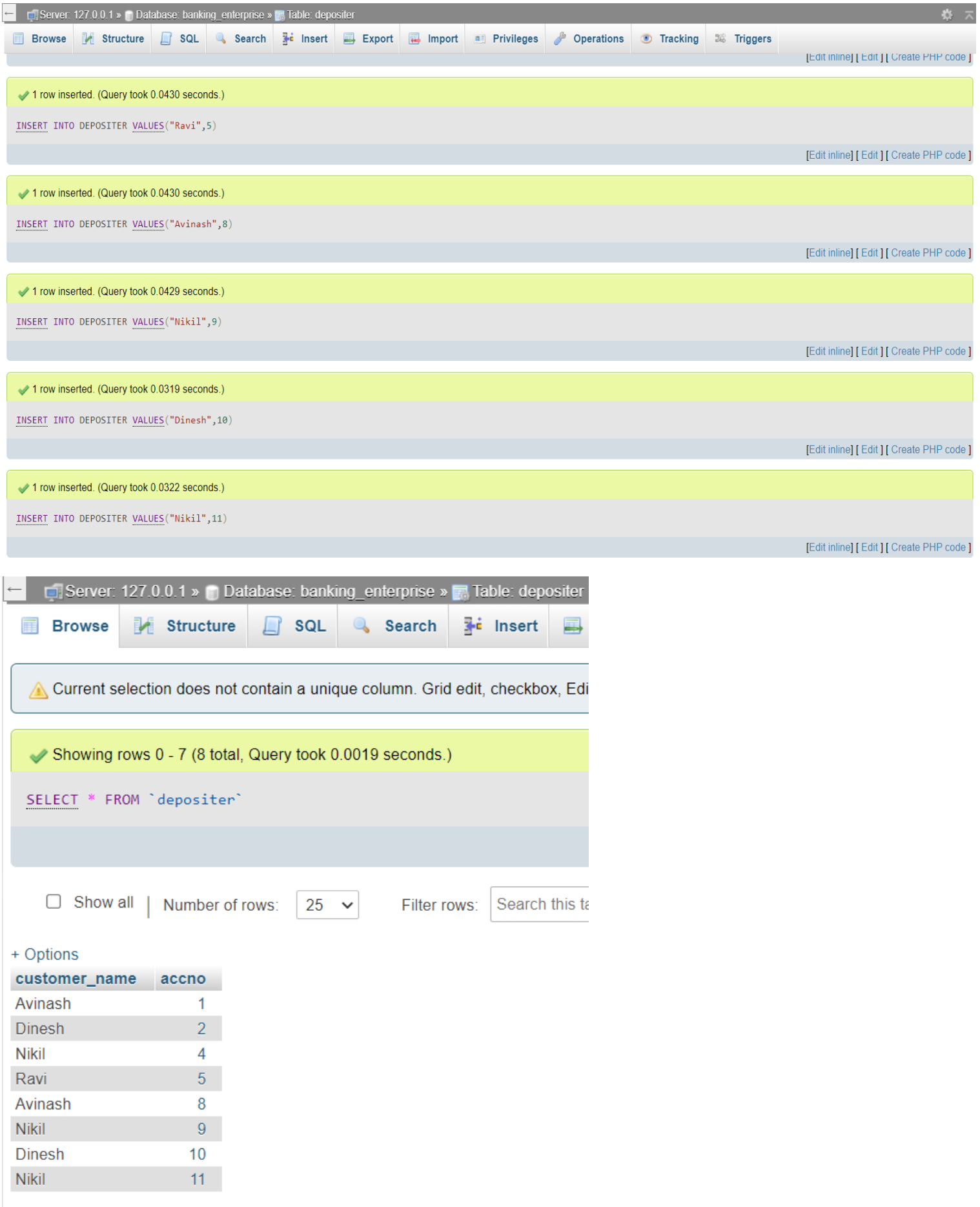

Server: 127.0.0.1 » Database: banking_enterprise » Table: bankcustomer
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking
Triggers
Show query box
1 row inserted. (Query took 0.0985 seconds.)
INSERT INTO BANKCUSTOMER VALUES("Avinash","Bull_Temple_Road","Bangalore")
[Edit inline] [Edit] [Create PHP code]
1 row inserted. (Query took 0.0380 seconds.)
INSERT INTO BANKCUSTOMER VALUES("Dinesh","Bannergatta_Road","Bangalore")
[Edit inline] [Edit] [Create PHP code]
1 row inserted. (Query took 0.0448 seconds.)
INSERT INTO BANKCUSTOMER VALUES("Satish","NationalCollege_Road","Bangalore")
[Edit inline] [Edit] [Create PHP code]
1 row inserted. (Query took 0.0455 seconds.)
INSERT INTO BANKCUSTOMER VALUES("Ramesh","Akbar_Road","Delhi")
[Edit inline] [Edit] [Create PHP code]
1 row inserted. (Query took 0.0324 seconds.)
INSERT INTO BANKCUSTOMER VALUES("Rohini","Prithiviraj_Road","Delhi")
[Edit inline] [Edit] [Create PHP code]


Server: 127.0.0.1 » Database: banking_enterprise » Table: bankcustomer
Browse
Structure
SQL
Search
Insert
Export
Import
Showing rows 0 - 4 (5 total, Query took 0.0006 seconds.)
SELECT * FROM `bankcustomer`
Show all
Number of rows: 25
Filter rows: Search this table
Sort by
+ Options
customer_name
customer_street
customer_city
Edit Copy Delete Avinash Bull_Temple_Road Bangalore
Edit Copy Delete Dinesh Bannergatta_Road Bangalore
Edit Copy Delete Ramesh Akbar_Road Delhi
Edit Copy Delete Rohini Prithiviraj_Road Delhi
Edit Copy Delete Satish NationalCollege_Road Bangalore

‘DEPOSITER’ table:

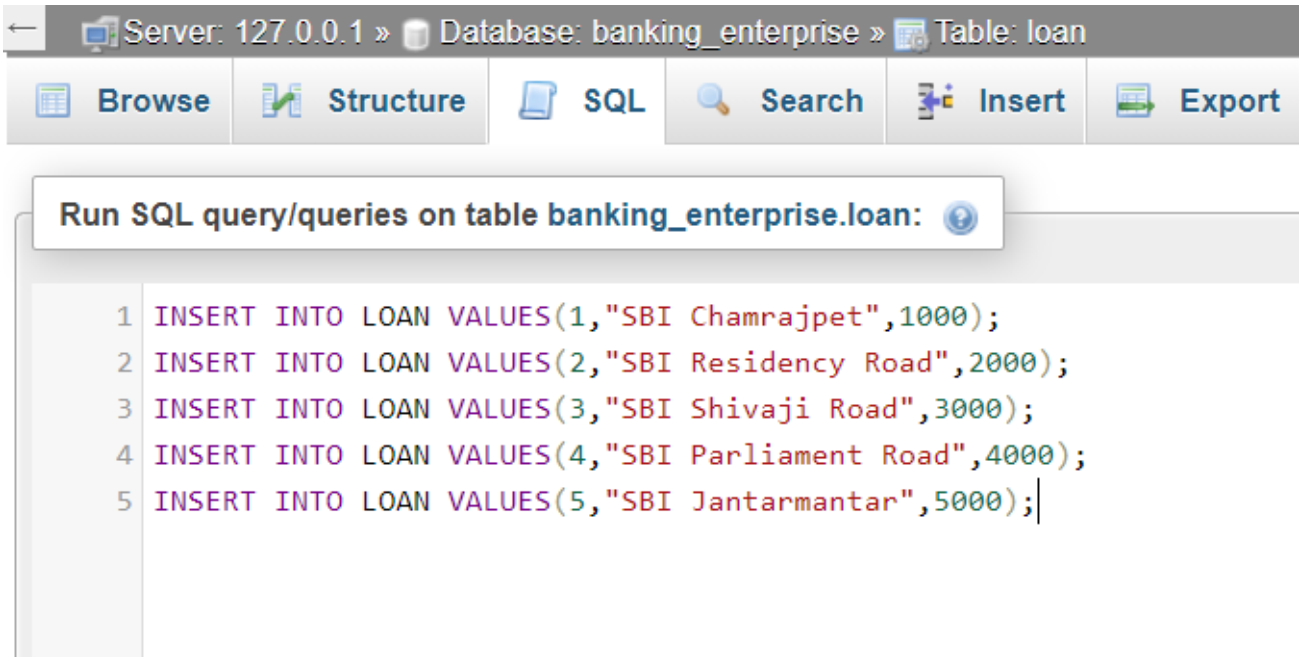


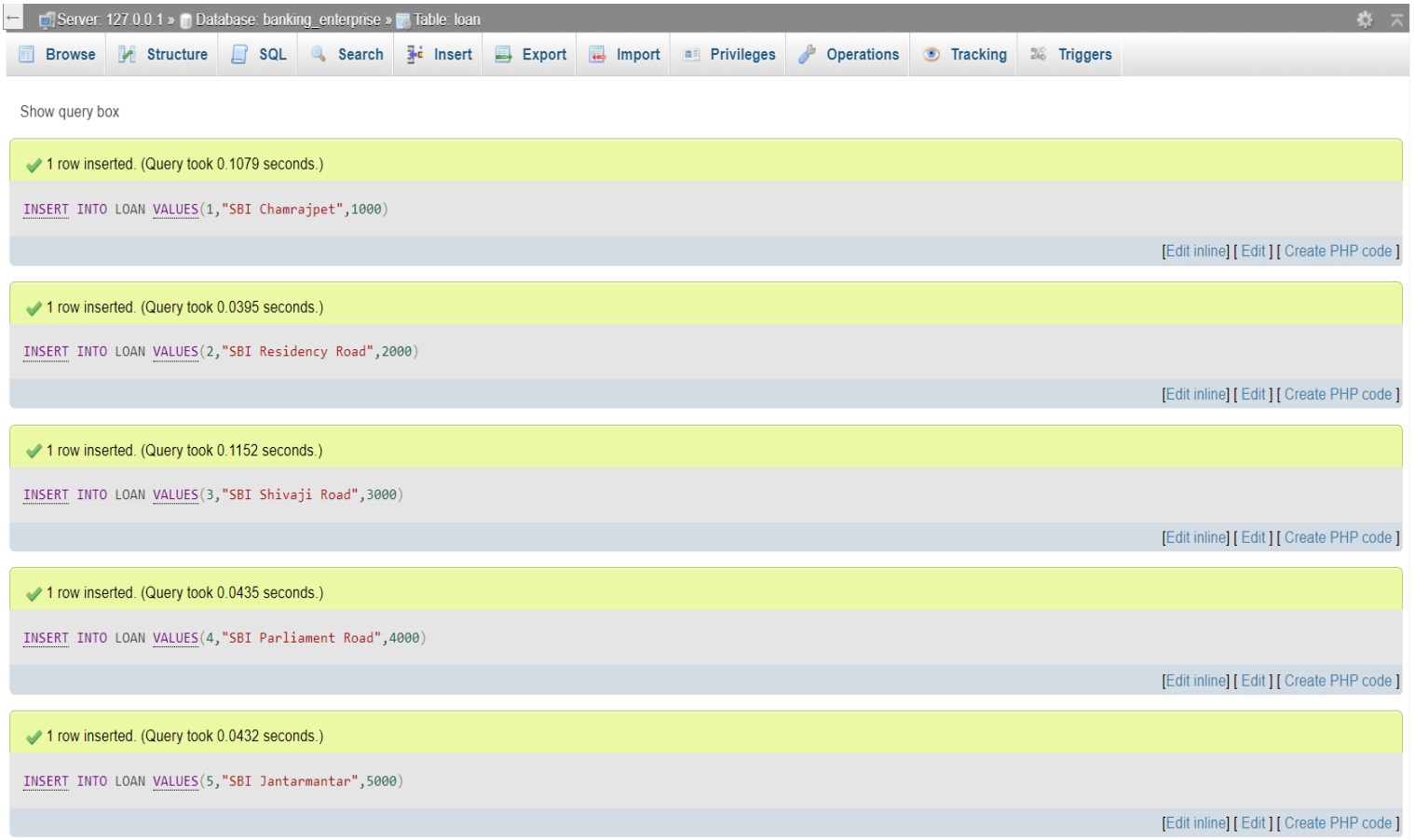




customer_name	accno
Avinash	1
Dinesh	2
Nikil	4
Ravi	5
Avinash	8
Nikil	9
Dinesh	10
Nikil	11

‘LOAN’ table:


Server: 127.0.0.1 » Database: banking_enterprise » Table: loan
Browse
Structure
SQL
Search
Insert
Export
Run SQL query/queries on table banking_enterprise.loan:
1 INSERT INTO LOAN VALUES(1,"SBI Chamrajpet",1000);
2 INSERT INTO LOAN VALUES(2,"SBI Residency Road",2000);
3 INSERT INTO LOAN VALUES(3,"SBI Shivaji Road",3000);
4 INSERT INTO LOAN VALUES(4,"SBI Parliament Road",4000);
5 INSERT INTO LOAN VALUES(5,"SBI Jantarmantar",5000);


Server: 127.0.0.1 » Database: banking_enterprise » Table: loan
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking
Triggers
Show query box
1 row inserted. (Query took 0.1079 seconds.)
INSERT INTO LOAN VALUES(1,"SBI Chamrajpet",1000)
[Edit inline] [Edit] [Create PHP code]
1 row inserted. (Query took 0.0395 seconds.)
INSERT INTO LOAN VALUES(2,"SBI Residency Road",2000)
[Edit inline] [Edit] [Create PHP code]
1 row inserted. (Query took 0.1152 seconds.)
INSERT INTO LOAN VALUES(3,"SBI Shivaji Road",3000)
[Edit inline] [Edit] [Create PHP code]
1 row inserted. (Query took 0.0435 seconds.)
INSERT INTO LOAN VALUES(4,"SBI Parliament Road",4000)
[Edit inline] [Edit] [Create PHP code]
1 row inserted. (Query took 0.0432 seconds.)
INSERT INTO LOAN VALUES(5,"SBI Jantarmantar",5000)
[Edit inline] [Edit] [Create PHP code]

Server: 127.0.0.1 » Database: banking_enterprise » Table: loan

Browse | Structure | SQL | Search | Insert | Export

Showing rows 0 - 4 (5 total, Query took 0.0008 seconds.)

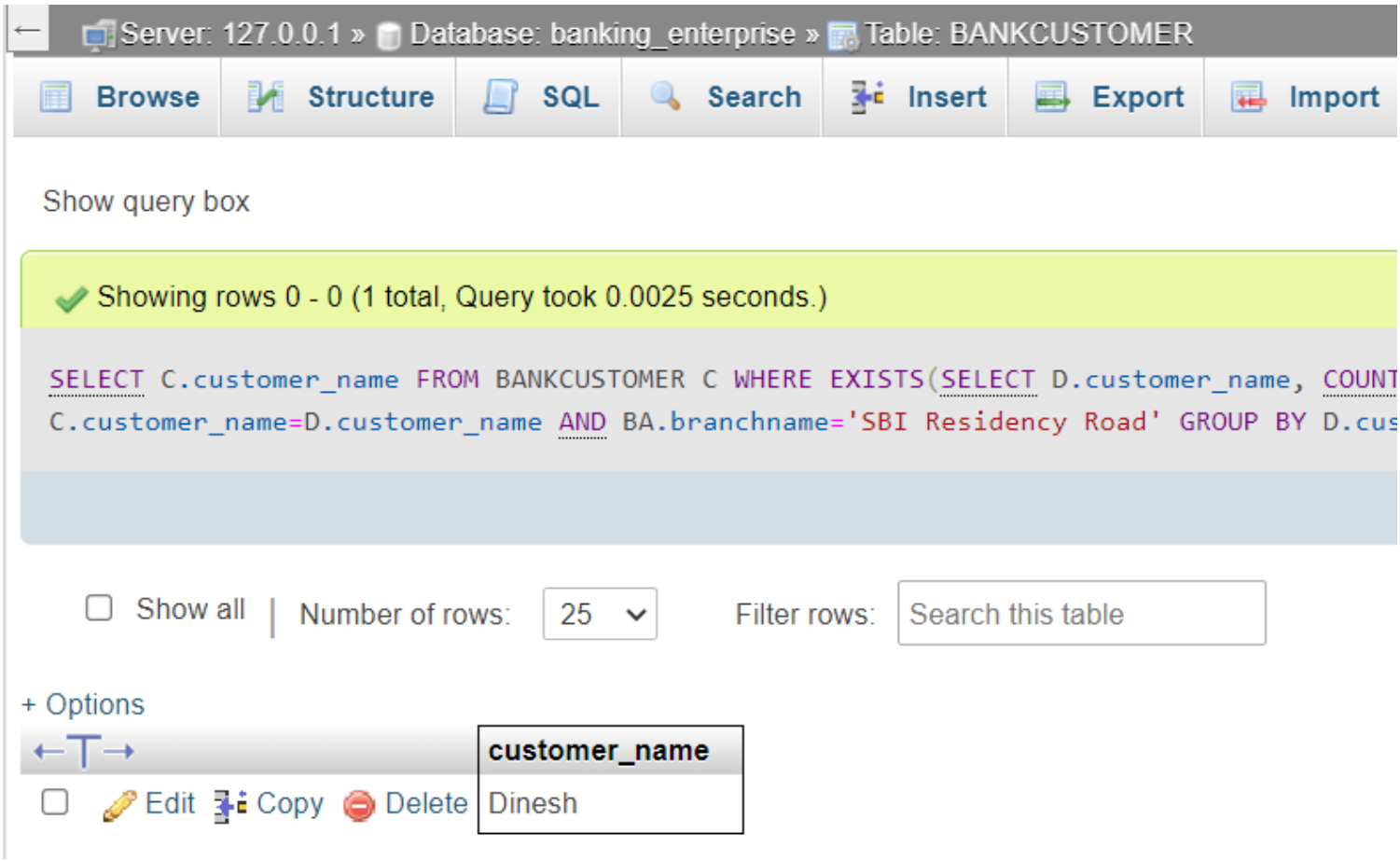
```
SELECT * FROM `loan`
```

Show all | Number of rows: 25 Filter rows: Search this table

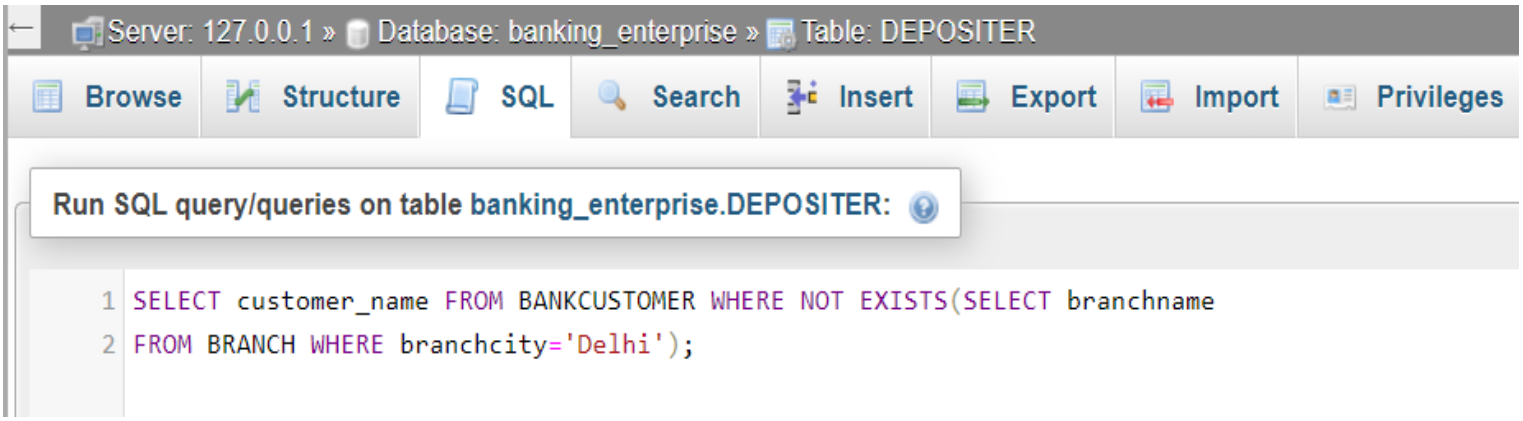
+ Options

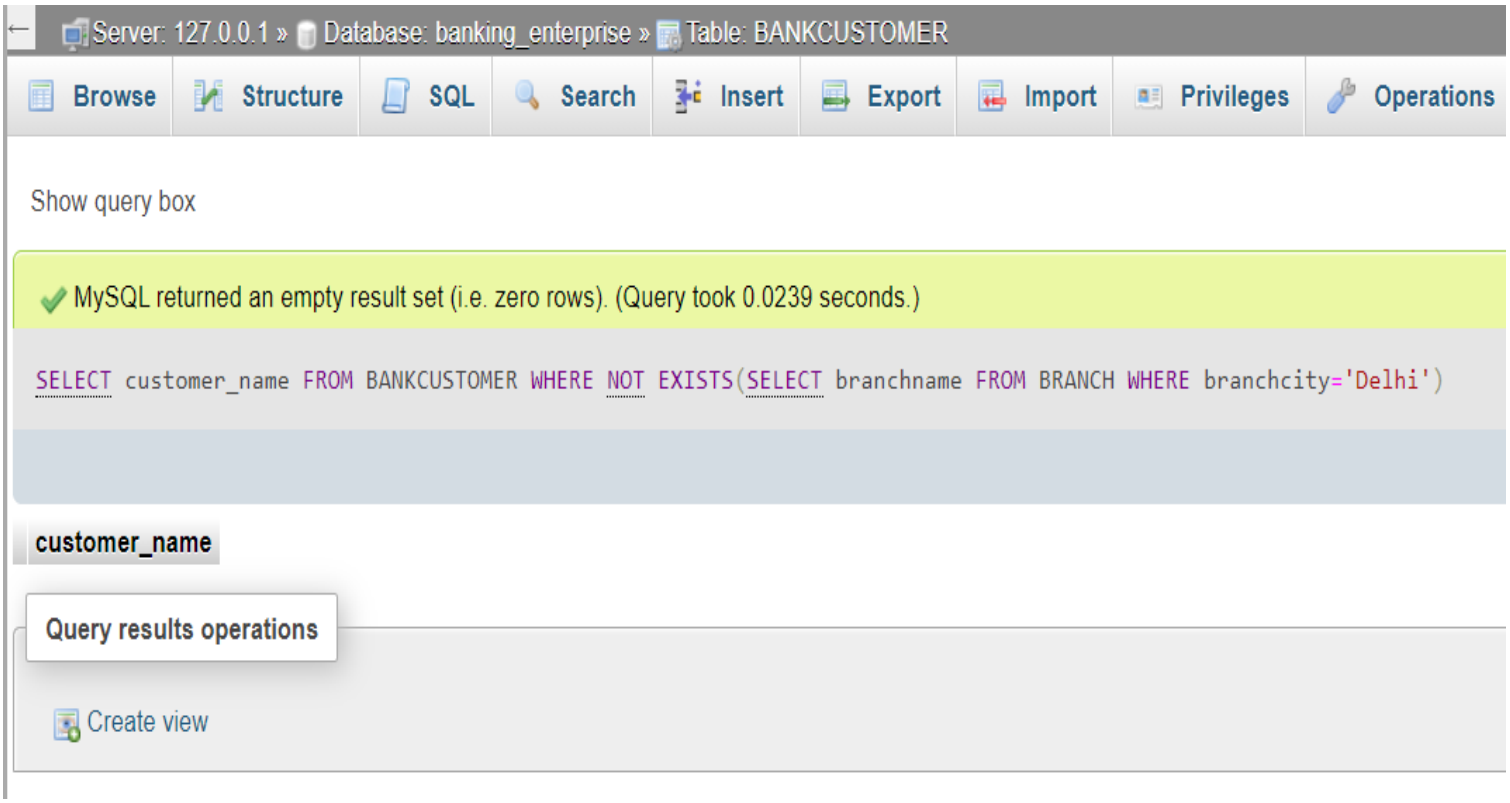
	loannumber	branchname	amount
Edit Copy Delete	1	SBI Chamrajpet	1000
Edit Copy Delete	2	SBI Residency Road	2000
Edit Copy Delete	3	SBI Shivaji Road	3000
Edit Copy Delete	4	SBI Parliament Road	4000
Edit Copy Delete	5	SBI Jantarmantar	5000

3) Find all the customers who have at least two accounts at the Main branch.

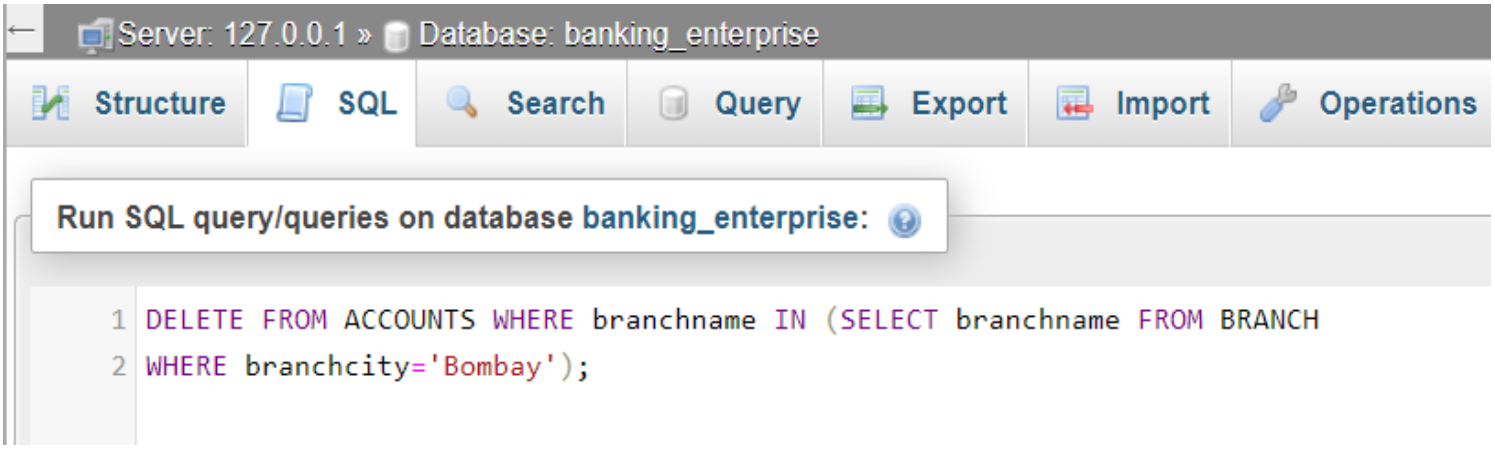


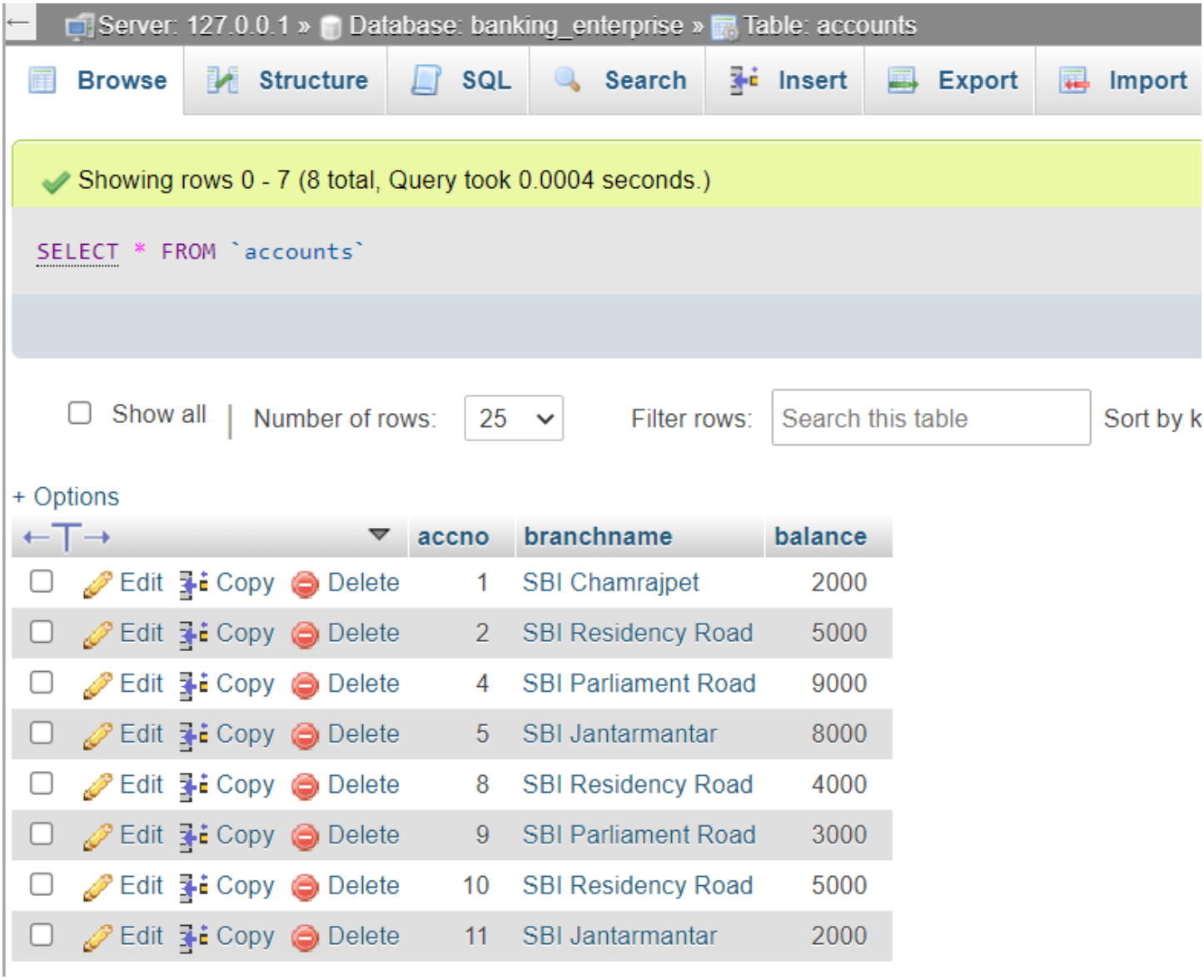
4) Find all the customers who have an account at all the branches located in a specific city.





5) Demonstrate how you delete all account tuples at every branch located in a specific city.





	accno	branchname	balance
Edit Copy Delete	1	SBI Chamrajpet	2000
Edit Copy Delete	2	SBI Residency Road	5000
Edit Copy Delete	4	SBI Parliament Road	9000
Edit Copy Delete	5	SBI Jantarmantar	8000
Edit Copy Delete	8	SBI Residency Road	4000
Edit Copy Delete	9	SBI Parliament Road	3000
Edit Copy Delete	10	SBI Residency Road	5000
Edit Copy Delete	11	SBI Jantarmantar	2000