Actual Data Objects:

**Customer:**CustomerID,first\_name,last\_name,address,phone\_Number,email,date\_of\_birth,age

**Branch**: name, address, asset

**Loan:** loan\_Number ,branch\_name,amount

**Borrower:** Borrower\_No,customer\_id, Loan\_Number

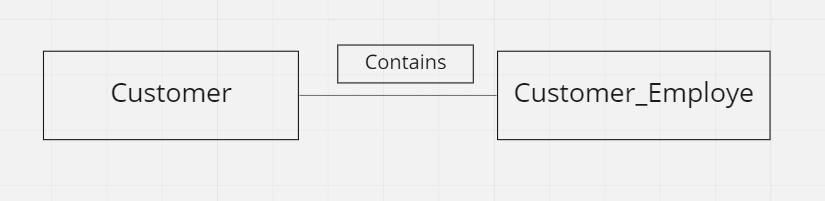
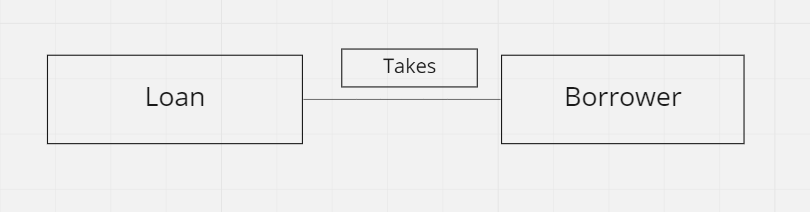
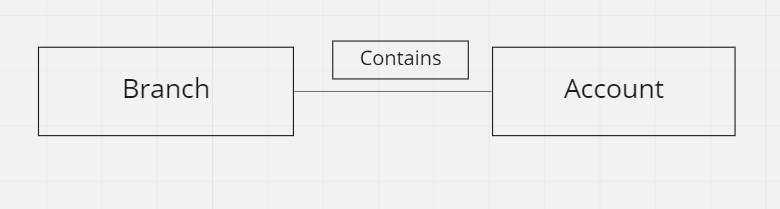
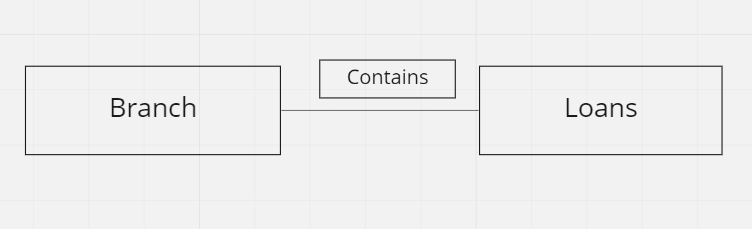
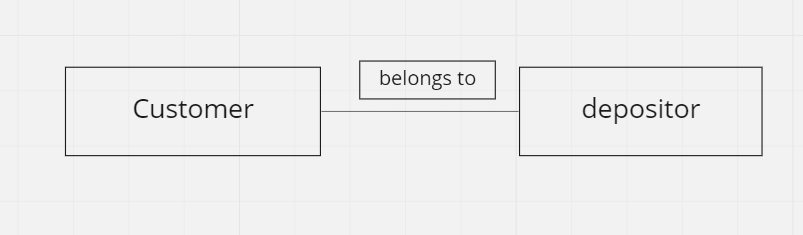
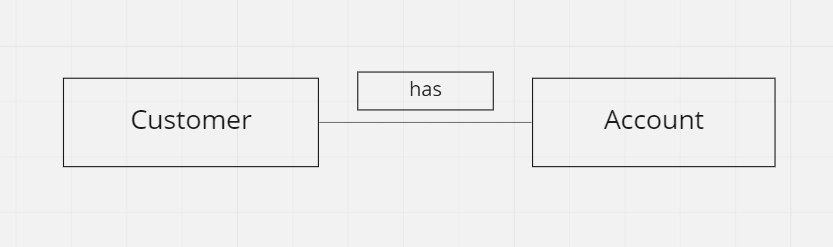
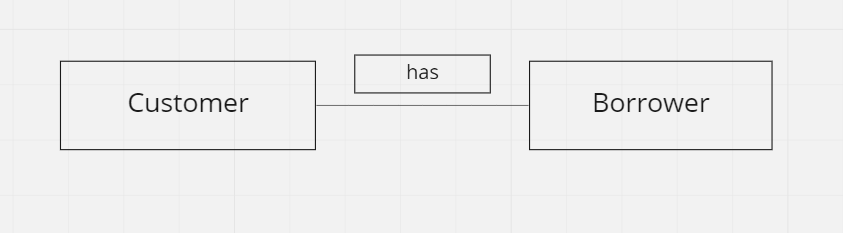
**Account:** acc\_Number, customer\_id ,Branch\_Name,Balance

**Depositor:** customer\_id,acc\_Number

**Employee:**employee\_Id,first\_name,last\_name,salary,address,blood\_group,phone\_number,email,date\_of\_birth,age

**Customer\_Employee:** Customer\_id, Employee\_Id

Relationship among data objects:



Schema Table:

Key: AI: Auto Incremented ID

Table 1: Schema table for Customer

|  |
| --- |
| Customer |
| |  |  |  | | --- | --- | --- | | Attributes | Types | Size | | customer\_id | number | AI | | first\_name | varchar | 250 | | last\_name | varchar | 250 | | address | varchar | 250 | | Phone\_Number | number | 11 | | email | varchar | 250 | | Date\_of\_birth | Date-time |  | | age | number | 3 | |

Table 2: Schema table for Branch

|  |
| --- |
| Branch |
| |  |  |  | | --- | --- | --- | | Attributes | Types | Size | | name | varchar | 250 | | address | varchar | 250 | | asset | number | AI | |

Table 3: Schema table for Loan

|  |
| --- |
| Loan |
| |  |  |  | | --- | --- | --- | | Attributes | Types | Size | | loan\_Number | number | 6 | | branch\_name | varchar | 250 | | amount | number | AI | |

Table 4: Schema table for Borrower

|  |
| --- |
| Borrower |
| |  |  |  | | --- | --- | --- | | Attributes | Types | Size | | Borrower\_No | number | AI | | customer\_id | number | AI | | loan\_Number | number | 6 | |

Table 5: Schema table for Account

|  |
| --- |
| Account |
| |  |  |  | | --- | --- | --- | | Attributes | Types | Size | | customer\_id | number | AI | | acc\_number | number | AI | | Branch\_Name | varchar | 250 | | balance | number | AI | |

Table 6: Schema table for Depositor

|  |
| --- |
| Depositor |
| |  |  |  | | --- | --- | --- | | Attributes | Types | Size | | customer\_id | number | AI | | acc\_Number | number | AI | |

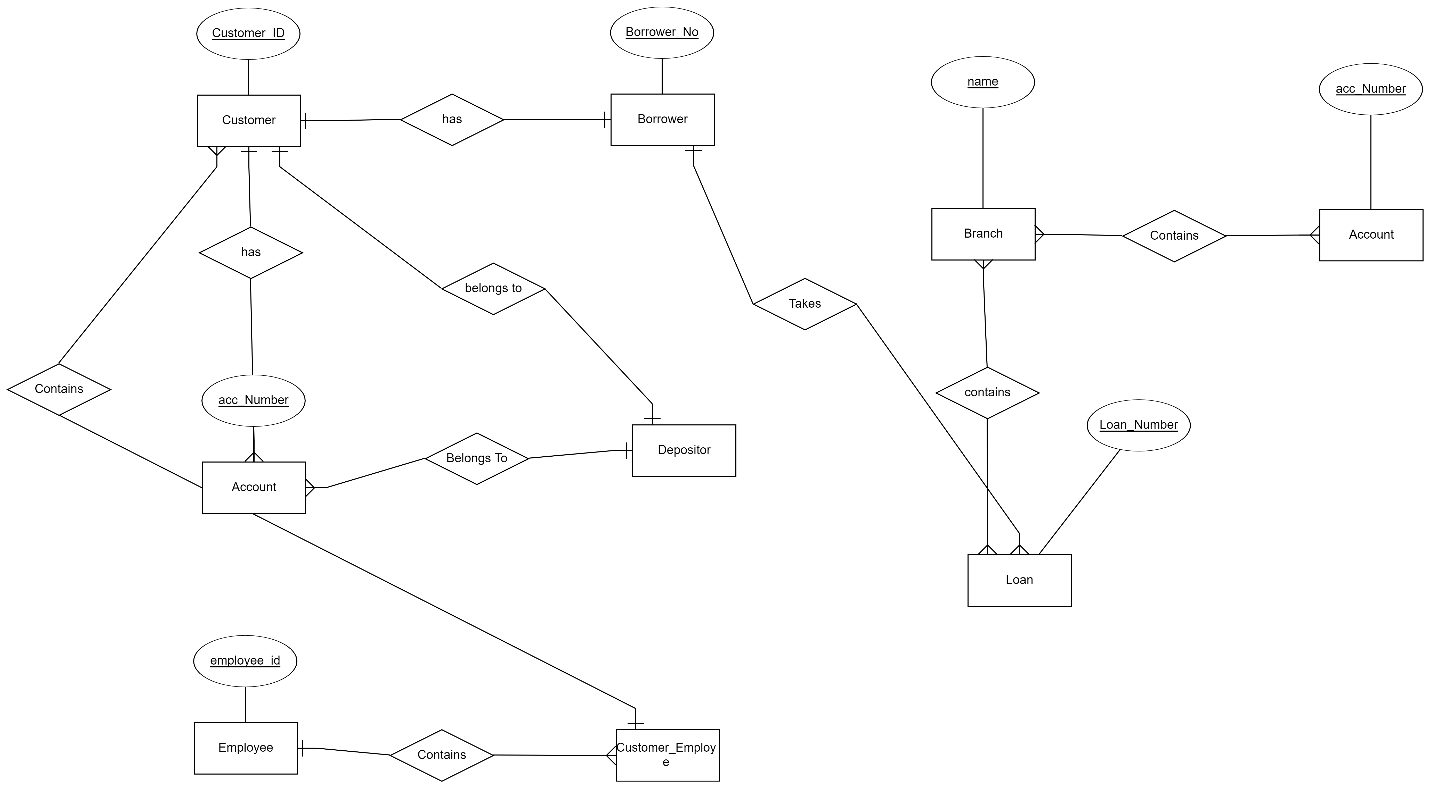
Table 7: Schema table for Employee

|  |
| --- |
| Employee |
| |  |  |  | | --- | --- | --- | | Attributes | Types | Size | | employee\_id | number | AI | | first\_name | varchar | 250 | | last\_name | varchar | 250 | | salary | number | 10 | | address | varchar | 250 | | blood\_group | varchar | 250 | | phone\_Number | number | 11 | | email | varchar | 250 | | Date\_of\_birth | Date-time |  | | age | number | 3 | |

Table 8: Schema table for Customer\_Employee

|  |
| --- |
| Depositor |
| |  |  |  | | --- | --- | --- | | Attributes | Types | Size | | customer\_id | number | AI | | Employee\_ID | number | AI | |

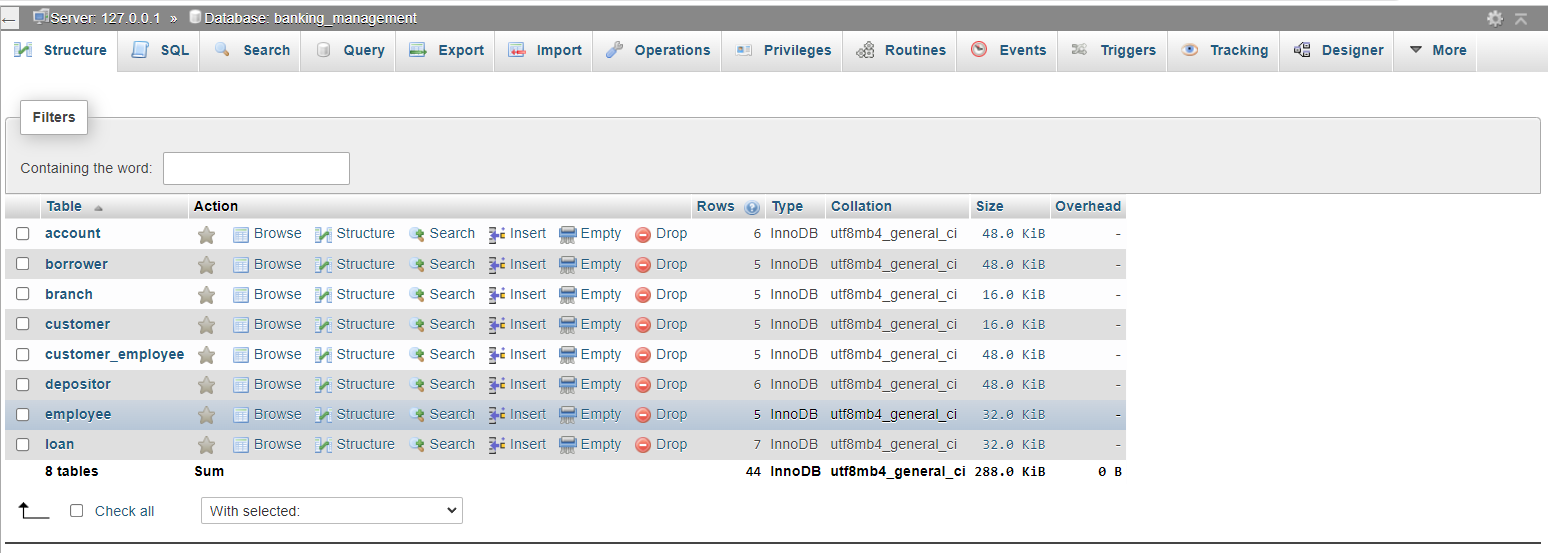
**Entity Relation:**

****

**Database Creation**

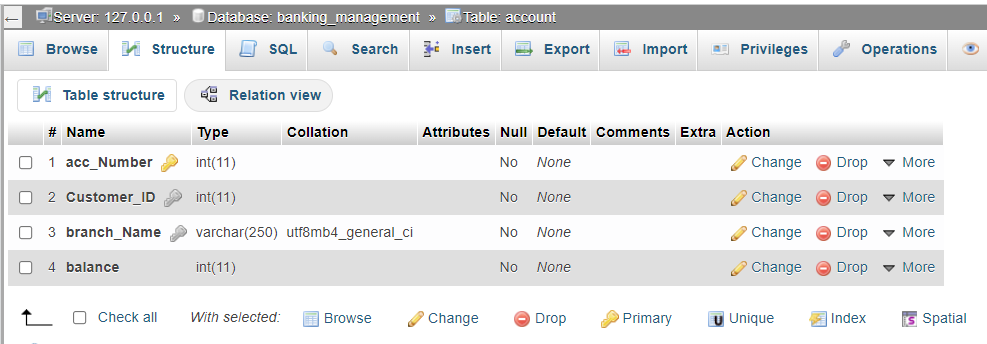
**XAMP:**

Creating the database **Banking\_manegement** and creating the tables from given ER diagram:

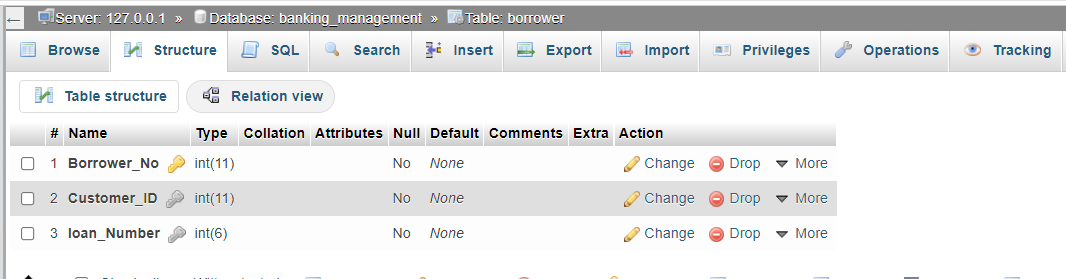


Adding the attributes in table **account** which have four attributes, one primary key and two foreign key:

Primary key(acc\_number),foreign key(Customer\_id,branch\_Name)

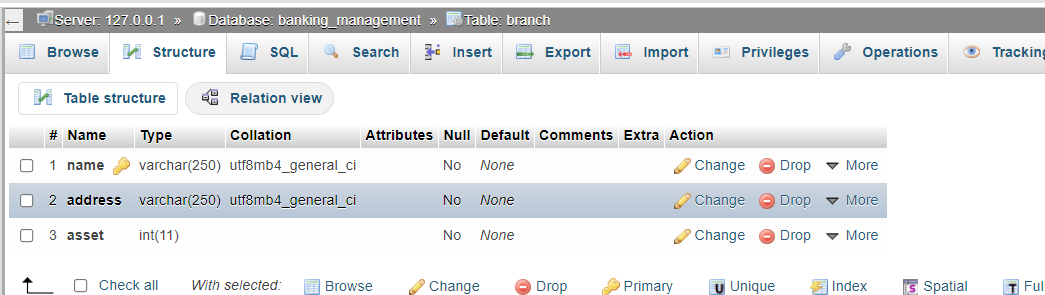


Adding the attributes in table **borrower** which have three attributes one primary key and two foreign key: Primary key(Borrower\_No), Foreign Key(Customer\_id,loan\_Number)



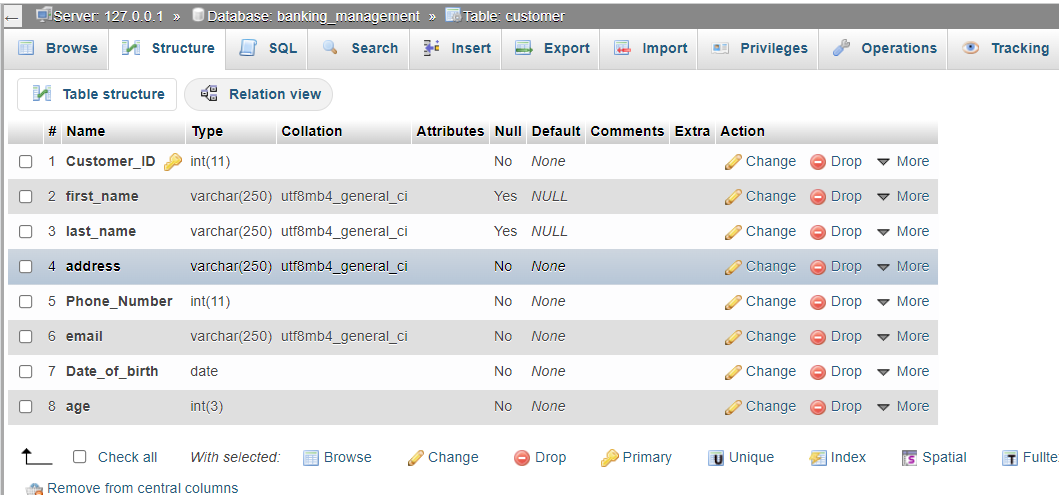
Adding the attributes in table **branch** which have three attributes one primary key:

Primary key(name)



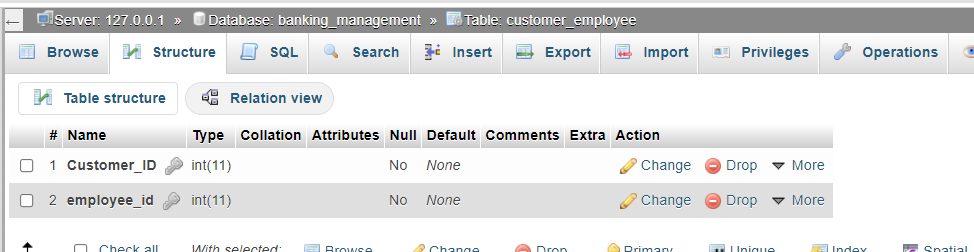
Adding the attributes in table **customer** which have eight attributes one primary key:

Primary key(customer\_ID)



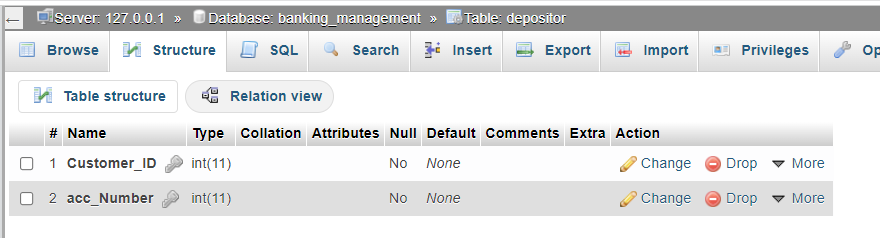
Adding the attributes in table **customer\_employee** which have two attributes and both are foreign key:

Foreign key(customer\_ID,employee\_id)



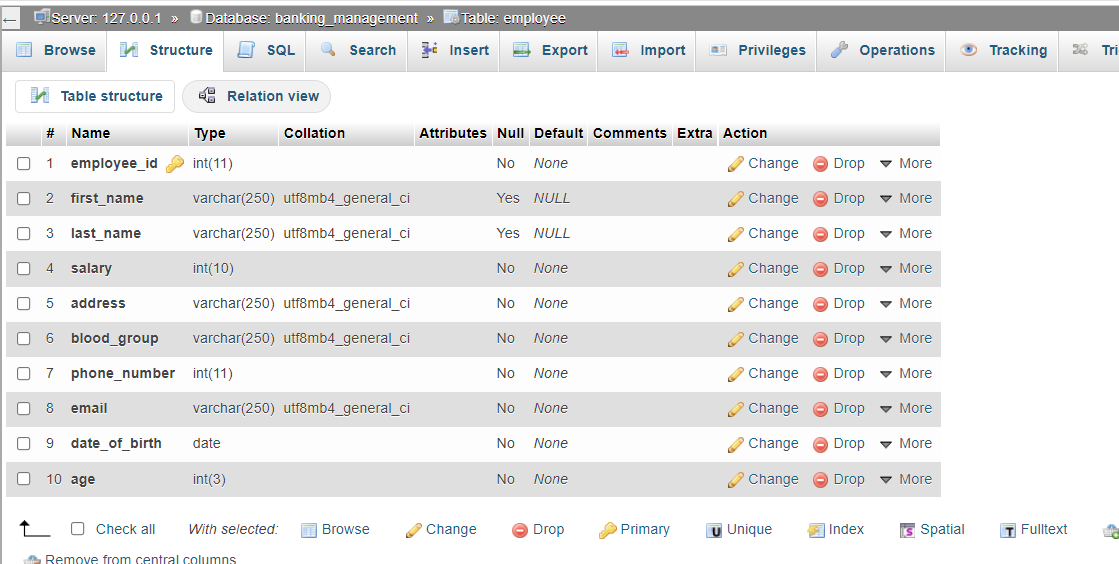
Adding the attributes in table **depositor** which have two attributes and both are foreign key:

Foreign key(customer\_ID,acc\_Number)



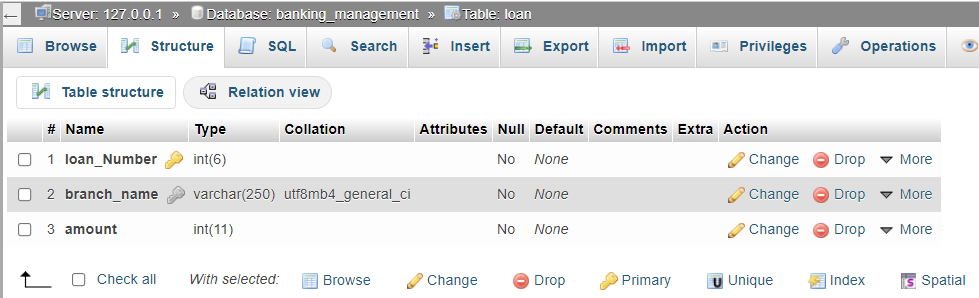
Adding the attributes in table **employee** which have ten attributes one primary key:

Primary key(employee\_ID)

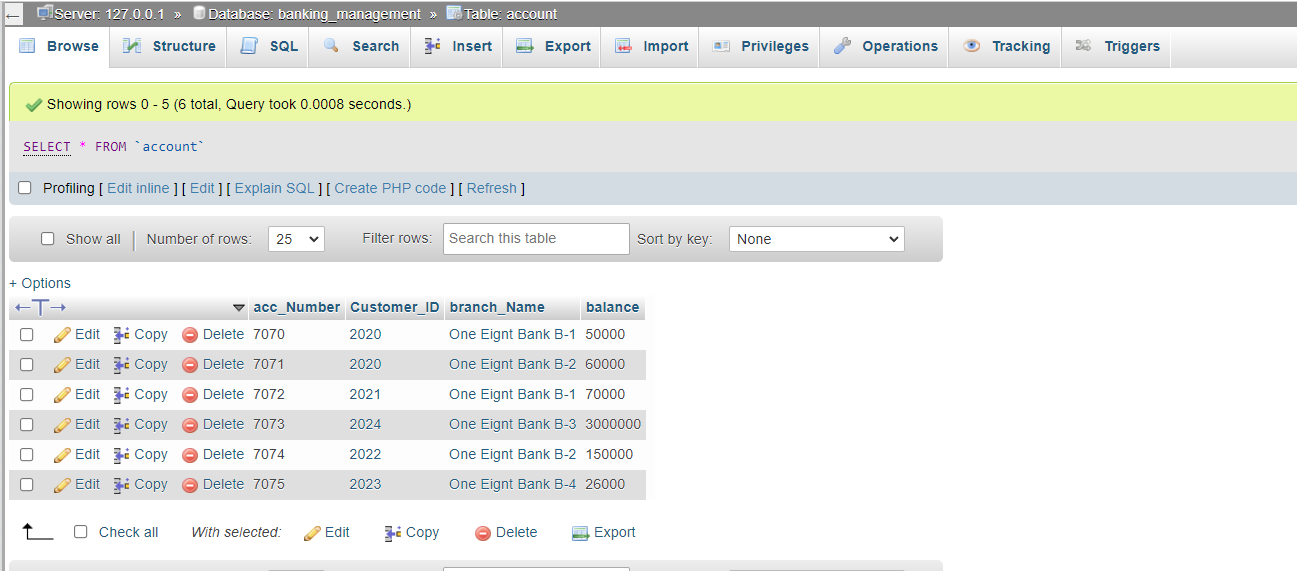


Adding the attributes in table **loan** which have three attributes one primary key and one foreign key:

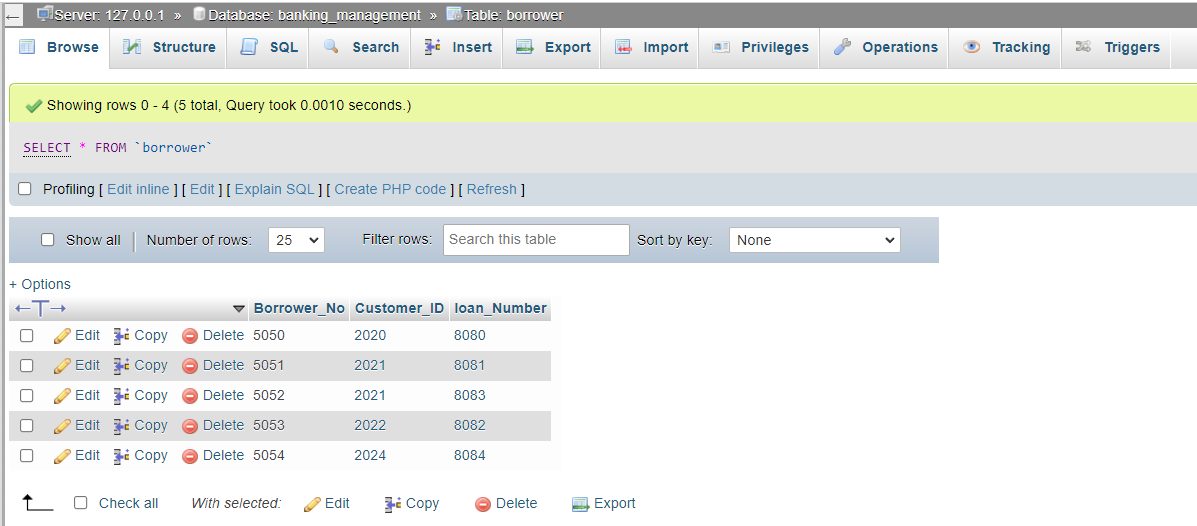
Primary key(loan\_Number), Foreign key(branch\_name)



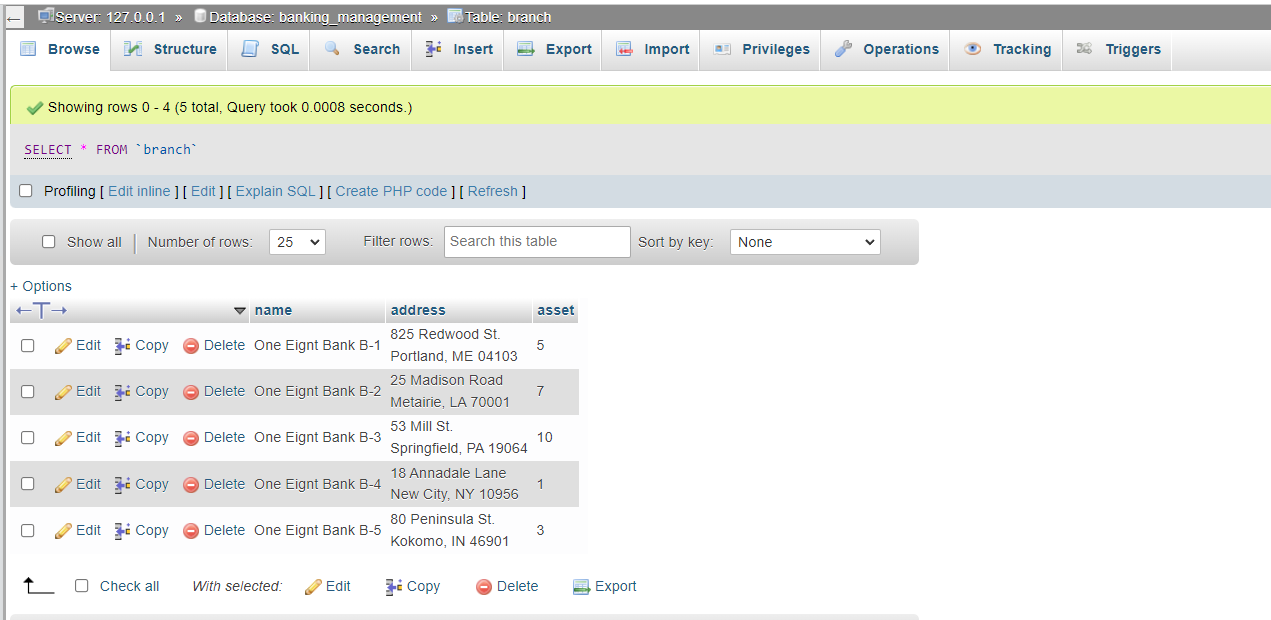
Inserting the values into table **account**:



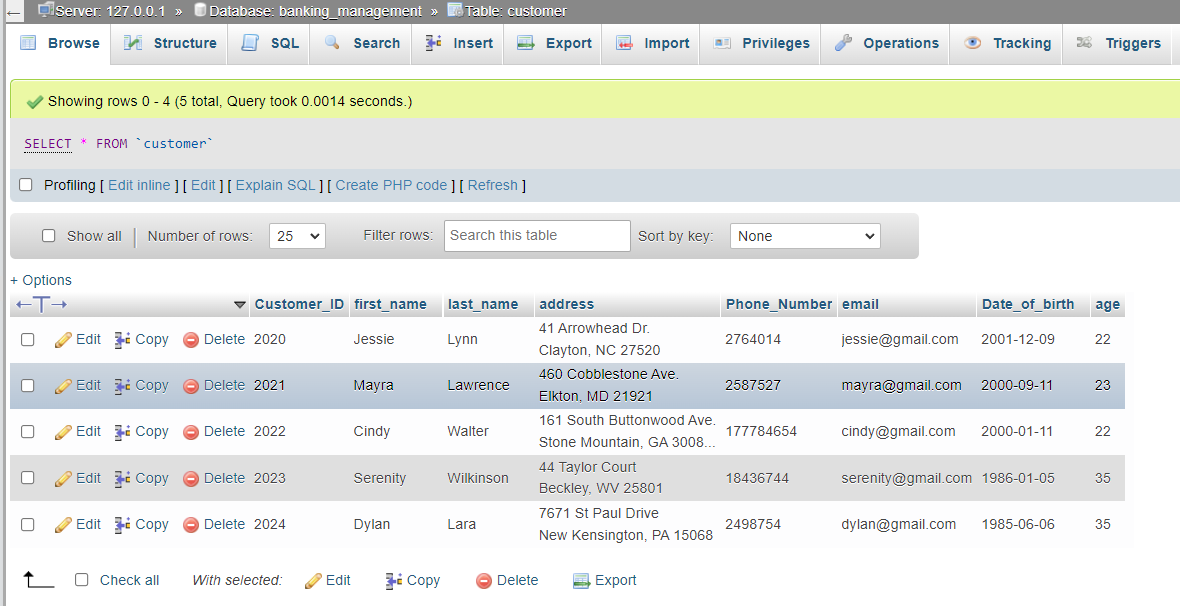
Inserting the values into table **borrower**:



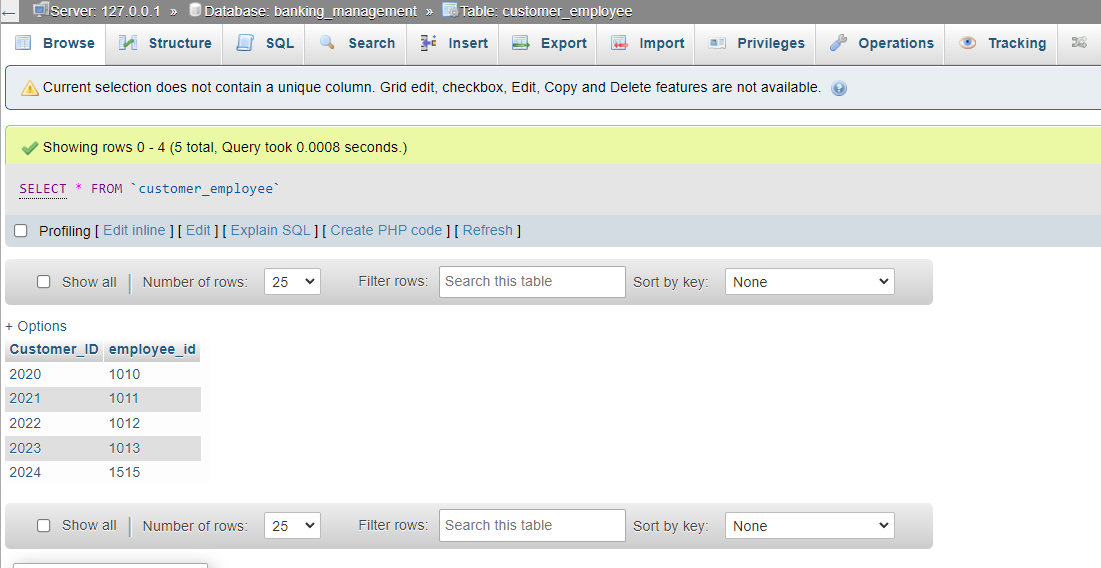
Inserting the values into table **branch**:



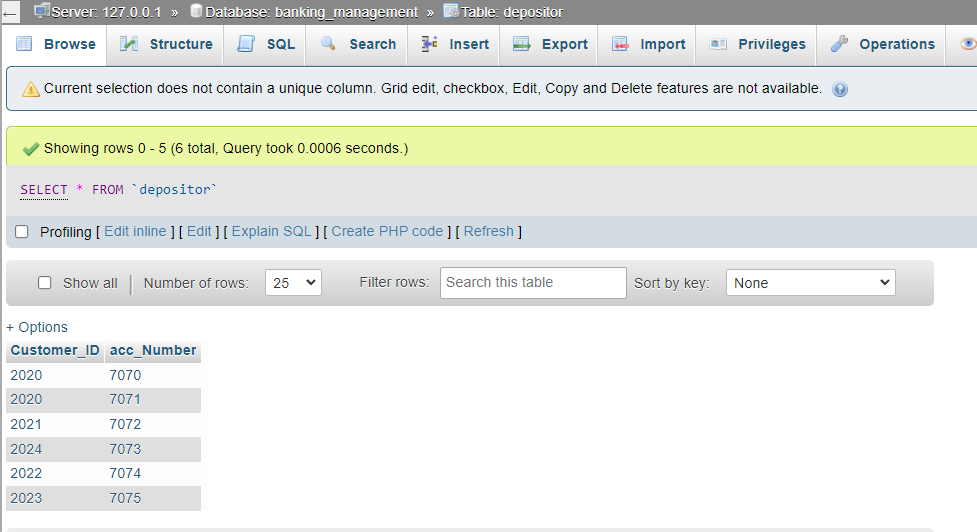
Inserting the values into table **customer:**



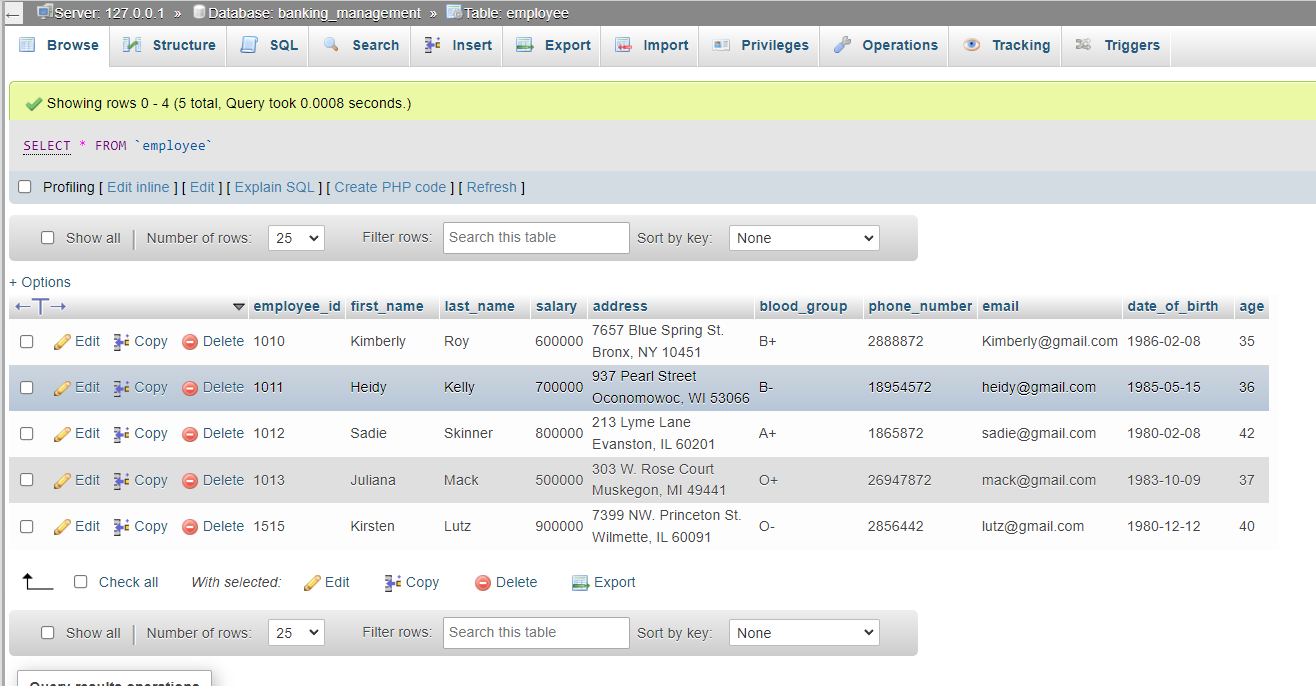
Inserting the values into table **customer\_employee**:



Inserting the values into table **depositor**:



Inserting the values into table **employee**:



Inserting the values into table **loan**:

