**Create the following tables for the banking database**

create table customer

(customer\_name varchar(15) not null unique,

customer\_street varchar(12) not null,

customer\_city varchar(15) not null,

primary key(customer\_name));

create table branch

(branch\_name varchar(15) not null unique,

branch\_city varchar(15) not null,

assets number not null,

primary key(branch\_name));

create table account

(account\_number varchar(15) not null unique,

branch\_name varchar(15) not null,

balance number not null,

primary key(account\_number));

create table loan

(loan\_number varchar(15) not null unique,

branch\_name varchar(15) not null,

amount number not null,

primary key(loan\_number));

create table depositor

(customer\_name varchar(15) not null,

account\_number varchar(15) not null,

primary key(customer\_name, account\_number),

foreign key(account\_number) references account(account\_number),

foreign key(customer\_name) references customer(customer\_name));

create table borrower

(customer\_name varchar(15) not null,

loan\_number varchar(15) not null,

primary key(customer\_name, loan\_number),

foreign key(customer\_name) references customer(customer\_name),

foreign key(loan\_number) references loan(loan\_number));

**Insert the following data to the corresponding tables.**

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All customer data.

Jones Main Harrison

Smith Main Rye

Hayes Main Harrison

Curry North Rye

Lindsay Park Pittsfield

Turner Putnam Stamford

Williams Nassau Princeton

Adams Spring Pittsfield

Johnson Alma Palo Alto

Glenn Sand Hill Woodside

Brooks Senator Brooklyn

Green Walnut Stamford

Jackson University Salt Lake

Majeris First Rye

McBride Safety Rye

15 rows selected.

- - - - - - - - - - - - - - - - - - - - - - - - - - - -

All branch data.

Downtown Brooklyn 900000

Redwood Palo Alto 2100000

Perryridge Horseneck 1700000

Mianus Horseneck 400200

Round Hill Horseneck 8000000

Pownal Bennington 400000

North Town Rye 3700000

Brighton Brooklyn 7000000

Central Rye 400280

9 rows selected.

- - - - - - - - - - - - - - - - - - - - - - - - - - - -

All account data.

A-101 Downtown 500

A-215 Mianus 700

A-102 Perryridge 400

A-305 Round Hill 350

A-201 Perryridge 900

A-222 Redwood 700

A-217 Brighton 750

A-333 Central 850

A-444 North Town 625

9 rows selected.

- - - - - - - - - - - - - - - - - - - - - - - - - - - -

All depositor data.

Johnson A-101

Smith A-215

Hayes A-102

Hayes A-101

Turner A-305

Johnson A-201

Jones A-217

Lindsay A-222

Majeris A-333

Smith A-444

10 rows selected.

- - - - - - - - - - - - - - - - - - - - - - - - - - - -

All loan data.

L-17 Downtown 1000

L-23 Redwood 2000

L-15 Perryridge 1500

L-14 Downtown 1500

L-93 Mianus 500

L-11 Round Hill 900

L-16 Perryridge 1300

L-20 North Town 7500

L-21 Central 570

9 rows selected.

- - - - - - - - - - - - - - - - - - - - - - - - - - - -

All borrower data.

Jones L-17

Smith L-23

Hayes L-15

Jackson L-14

Curry L-93

Smith L-11

Williams L-17

Adams L-16

McBride L-20

Smith L-21

10 rows selected.

- - - - - - - - - - - - - - - - - - - - - - - - - - - -

**Write SQL Queries**

1. Find names and cities of all borrowers
2. Find set of names and cities of customers who have a loan at Perryridge branch
3. Numbers of accounts with balances between 700 and 900.
4. Names of customers on streets with names ending in "Hill".
5. Find all loan number for loans made at the Perryridge branch with loan amounts greater than $1200.
6. Find the loan number of those loans with loan amounts between $90,000 and $100,000
7. Find the name, loan number and loan amount of all customers; rename the column name *loan\_number as loan\_id*
8. Find the name, loan number and loan amount of all customers having a loan at the Perryridge branch.
9. Find the customer names and their loan numbers for all customers having a loan at some branch.
10. Find the names of all branches that have greater assets than some branch located in Brooklyn.
11. Find the names of all customers whose street includes the substring “Main”.
12. List in alphabetic order the names of all customers having a loan in Perryridge branch
13. Find all customers who have a loan, an account, or both:
14. Find all customers who have both a loan and an account.
15. Find all customers who have an account but no loan.
16. Set of names of customers at Perryridge branch, in alphabetical order.
17. Loan data, ordered by decreasing amounts, then increasing loan numbers.
18. Find the average account balance at the Perryridge branch.
19. Find the number of tuples in the *customer* relation.
20. Find the number of depositors in the bank.
21. Find the number of depositors for each branch
22. Find the names of all branches where the average account balance is more than $1,200.
23. Find Names of branches having at least one account, with average account balances.
24. Find all branches that have greater assets than some branch located in Brooklyn.
25. Find Names of branches having at least one account, with size of set of customers