SOLUTION:

1) Find all branch names and cities with assets more than 1000000.

```
select branch_name, branch_city from branch where assets > 1000000;
```

```
BRANCH_NAME     BRANCH_CITY
--------------- ---------------
Redwood         Palo Alto
Perryridge      Horseneck
Round Hill      Horseneck
North Town      Rye
Brighton        Brooklyn
```

2) Find all account_numbers and their balance which are opened in 'Downtown' branch or which have balance in between 600 and 750.

```
select account_number, balance from account where branch_name =
'Downtown' or balance between 600 and 750;
```

```
ACCOUNT_NUMBER     BALANCE
--------------- ----------
A-101                  500
A-215                  700
A-222                  700
A-217                  750
A-444                  625
```

3) Find all account_numbers which are opened in a branch located in 'Rye' city.

```
select account_number from account natural join branch where branch_city =
'Rye';
```

```
ACCOUNT_NUMBER
--------------
A-333
A-444
```

4) Find all loan numbers which have amount greater than or equal to 1000 and their customers are living in 'Harrison' city.

```
Select loan.loan_number from borrower, loan, customer where amount >= 1000
and customer_city = 'Harrison' and loan.loan_number = borrower.loan_number
and borrower.customer_name = customer.customer_name;

LOAN_NUMBER
---------------
L-17
L-15
```

5) Display the account related information based on the descending order of the balance.

```
select * from from account order by balance desc;

ACCOUNT_NUMBER  BRANCH_NAME       BALANCE
--------------- --------------- ----------
A-201           Perryridge            900
A-333           Central               850
A-217           Brighton              750
A-215           Mianus                700
A-222           Redwood               700
A-444           North Town            625
A-101           Downtown              500
A-102           Perryridge            400
A-305           Round Hill            350
```

6) Display the customer related information in alphabetic order of customer cities.

```
select * from customer order by customer_city;

CUSTOMER_NAME   CUSTOMER_STR CUSTOMER_CITY
--------------- ------------ ---------------
Brooks          Senator      Brooklyn
Hayes           Main         Harrison
Jones           Main         Harrison
Johnson         Alma         Palo Alto
Adams           Spring       Pittsfield
Lindsay         Park         Pittsfield
Williams        Nassau       Princeton
Curry           North        Rye
McBride         Safety       Rye
Smith           Main         Rye
Majeris         First        Rye
Jackson         University   Salt Lake
Green           Walnut       Stamford
```

Turner Putnam Stamford
Glenn Sand Hill Woodside

7) Find all customer names who have an account as well as a loan.

select customer_name from depositor intersect select customer_name from borrower;

CUSTOMER_NAME

Hayes
Jones
Smith

8) Find all customer related information who have an account or a loan.

select customer_name, customer_street, customer_city from depositor natural join customer union select customer_name, customer_street, customer_city from borrower natural join customer;

CUSTOMER_NAME CUSTOMER_STR CUSTOMER_CITY

Adams Spring Pittsfield
Curry North Rye
Hayes Main Harrison
Jackson University Salt Lake
Johnson Alma Palo Alto
Jones Main Harrison
Lindsay Park Pittsfield
Majeris First Rye
McBride Safety Rye
Smith Main Rye
Turner Putnam Stamford
Williams Nassau Princeton

9) Find all customer names and their cities who have a loan but not an account.

select customer_name, customer_city from borrower natural join customer minus select customer_name, customer_city from depositor natural join customer;

CUSTOMER_NAME CUSTOMER_CITY

Adams Pittsfield
Curry Rye
Jackson Salt Lake

McBride Rye
Williams Princeton

10) Find the total assets of all branches.

```
select sum(assets) from branch;

SUM(ASSETS)
-----------
  24600480
```

11) Find the average balance of accounts at each branch.

```
select branch_name, avg(balance) from account group by branch_name;

BRANCH_NAME     AVG(BALANCE)
--------------- ------------
Round Hill               350
Mianus                   700
Perryridge               650
Redwood                  700
Brighton                 750
Central                  850
Downtown                 500
North Town               625
```

12) Find the average balance of accounts at each branch city.

```
select branch_city, avg(balance) from account natural join branch group by
branch_city;

BRANCH_CITY     AVG(BALANCE)
--------------- ------------
Horseneck              587.5
Brooklyn                 625
Palo Alto                700
Rye                    737.5
```

13) Find the lowest amount of loan at each branch.

```
select branch_name, min(amount) from loan group by branch_name;

BRANCH_NAME     MIN(AMOUNT)
--------------- -----------
Round Hill             900
Mianus                 500
```

Perryridge 1300
Redwood 2000
Central 570
Downtown 1000
North Town 7500

14) Find the total number of loans at each branch.

```
select branch_name, count(loan_number) from loan group by branch_name;
```

```
BRANCH_NAME     COUNT(LOAN_NUMBER)
--------------- ------------------
Round Hill                    1
Mianus                        1
Perryridge                    2
Redwood                       1
Central                       1
Downtown                      2
North Town                    1
```

15) Find the customer name and account number of the account which has the highest balance.

```
select customer_name, account_number from depositor natural join account
where balance = (select max(balance) from account);
```

```
CUSTOMER_NAME   ACCOUNT_NUMBER
--------------- ---------------
Johnson         A-201
```