**Query Testing**

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| **Customer**   |  |  |  | | --- | --- | --- | | CUSTOMER\_NAME | CUSTOMER\_STREET | CUSTOMER\_CITY | | Adams | Spring | Pittsfield | | Brooks | Senator | Brooklyn | | Curry | North | Rye | | Glenn | Sand Hill | Woodside | | Green | Walnut | Stamford | | Hayes | Main | Harrison | | Johnson | Alma | Palo Alto | | Jones | Main | Harrison | | Smith | Main | Rye | | Turner | Putnam | Stamford | | Williams | Nassau | Princeton | | **Depositor**   |  |  | | --- | --- | | **CUSTOMER\_NAME** | **ACCOUNT\_NUMBER** | | Johnson | A-101 | | Smith | A-215 | | Hayes | A-102 | | Turner | A-305 | | Johnson | A-201 | | Jones | A-217 | | Lindsay | A-222 | |
| **Account**   |  |  |  | | --- | --- | --- | | **ACCOUNT\_NUMBER** | **BRANCH\_NAME** | **BALANCE** | | 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 | | **Borrower**   |  |  | | --- | --- | | **CUSTOMER\_NAME** | **LOAN\_NUMBER** | | Jones | L-17 | | Smith | L-23 | | Hayes | L-15 | | Jackson | L-14 | | Curry | L-93 | | Smith | L-11 | | Williams | L-17 | | Adams | L-16 | |
| **Loan**   |  |  |  | | --- | --- | --- | | **LOAN\_NUMBER** | **BRANCH\_NAME** | **AMOUNT** | | 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 | | **Branch**   |  |  |  | | --- | --- | --- | | BRANCH\_NAME | BRANCH\_CITY | ASSETS | | 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 | |

# CREATE TABLE "customer" AND INSERT DATA:

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

create table customer (

Customer\_name varchar(15),

Customer\_street varchar(15),

Customer\_city varchar(15)

);

insert into customer values('Adams','Spring','Pittsfield');

insert into customer values('Brooks','Senator','Brooklyn');

insert into customer values('Curry','North','Rye');

insert into customer values('Glenn','Sand Hill','Woodside');

insert into customer values('Green','Walnut','Stamford');

insert into customer values('Hayes','Main','Harrison');

insert into customer values('Johnson','Alma','Palo Alto');

insert into customer values('Jones','Main','Harrison');

insert into customer values('Smith','Main','Rye');

insert into customer values('Turner','Putnam','Stamford');

insert into customer values('Williams','Nassau','Princeton');

# CREATE TABLE "branch" AND INSERT DATA:

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

create table branch (

Branch\_name varchar(12),

Branch\_city varchar(12),

Assets int

);

insert into branch values('Downtown','Brooklyn',900000);

insert into branch values('Redwood','Palo Alto',2100000);

insert into branch values('Perryridge','Horseneck',1700000);

insert into branch values('Mianus','Horseneck',400200);

insert into branch values('Round Hill','Horseneck',8000000);

insert into branch values('Pownal','Bennington',400000);

insert into branch values('North Town','Rye',3700000);

insert into branch values('Brighton','Brooklyn',7000000);

# CREATE TABLE "account" AND INSERT DATA:

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

create table account (

Account\_number varchar(15),

Branch\_name varchar(12),

Balance int

);

insert into account values('A-101','Downtown',500);

insert into account values('A-215','Mianus',700);

insert into account values('A-102','Perryridge',400);

insert into account values('A-305','Round Hill',350);

insert into account values('A-201','Perryridge',900);

insert into account values('A-222','Redwood',700);

insert into account values('A-217','Brighton',750);

# CREATE TABLE "depositor" AND INSERT DATA:

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

create table depositor (

Customer\_name varchar(15),

Account\_number varchar(15)

);

insert into depositor values('Johnson','A-101');

insert into depositor values('Smith','A-215');

insert into depositor values('Hayes','A-102');

insert into depositor values('Turner','A-305');

insert into depositor values('Johnson','A-201');

insert into depositor values('Jones','A-217');

insert into depositor values('Lindsay','A-222');

# CREATE TABLE "loan" AND INSERT DATA:

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

create table loan(

Loan\_number varchar(12),

Branch\_name varchar(12),

Amount int

);

insert into loan values('L-17','Downtown',1000);

insert into loan values('L-23','Redwood',2000);

insert into loan values('L-15','Perryridge',1500);

insert into loan values('L-14','Downtown',1500);

insert into loan values('L-93','Mianus',500);

insert into loan values('L-11','Round Hill',900);

insert into loan values('L-16','Perryridge',1300);

# CREATE TABLE "borrower" AND INSERT DATA:

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

create table borrower(

Customer\_name varchar(15),

Loan\_number varchar(12)

);

insert into borrower values('Jones','L-17');

insert into borrower values('Smith','L-23');

insert into borrower values('Hayes','L-15');

insert into borrower values('Jackson','L-14');

insert into borrower values('Curry','L-93');

insert into borrower values('Smith','L-11');

insert into borrower values('Williams','L-17');

insert into borrower values('Adams','L-16');

#01. Find the names & cities of all borrowers

""""""""""""""""""""""""""""""""""""""""""""""

|  |  |
| --- | --- |
| **CUSTOMER\_NAME** | **CUSTOMER\_CITY** |
| Jones | Harrison |
| Smith | Rye |
| Hayes | Harrison |
| Curry | Rye |
| Williams | Princeton |
| Adams | Pittsfield |

#02. Set of names & cities of customers who have a loan at "Perryridge" branch

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |  |
| --- | --- |
| **CUSTOMER\_NAME** | **CUSTOMER\_CITY** |
| Adams | Pittsfield |
| Hayes | Harrison |

#03. Number of accounts with balance between 700 and 900

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |  |
| --- | --- |
| **ACCOUNT\_NUMBER** | **BALANCE** |
| A-215 | 700 |
| A-201 | 900 |
| A-222 | 700 |
| A-217 | 750 |

#04. Name of customers on streets with names ending in "Hill"

""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |  |
| --- | --- |
| **CUSTOMER\_NAME** | **CUSTOMER\_STREET** |
| Glenn | Sand Hill |

#05. Name of customers with both accounts and loans at "Perryridge" branch

|  |  |  |  |
| --- | --- | --- | --- |
| """"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""" |  |  |  |

|  |
| --- |
| **CUSTOMER\_NAME** |
| Hayes |

#06. Names of customers with an account but not a loan at "Perryridge" branch

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |
| --- |
| **CUSTOMER\_NAME** |
| Johnson |

#07. Names & cities of all borrowers

"""""""""""""""""""""""""""""""""""""

|  |  |
| --- | --- |
| **CUSTOMER\_NAME** | **CUSTOMER\_CITY** |
| Jones | Harrison |
| Smith | Rye |
| Hayes | Harrison |
| Curry | Rye |
| Williams | Princeton |
| Adams | Pittsfield |

#08. Set of names of customers with accounts at a branch where "Hayes" has an account

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |
| --- |
| **CUSTOMER\_NAME** |
| Hayes |
| Johnson |

#09. Set of names of branch whose assets are greater than the Assets of some branch in "Brooklyn"

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |  |
| --- | --- |
| **BRANCH\_NAME** | **ASSETS** |
| Redwood | 2100000 |
| Perryridge | 1700000 |
| Round Hill | 8000000 |
| North Town | 3700000 |
| Brighton | 7000000 |

#10. Set of names of branch whose assets are greater than the Assets of all branch in "Brooklyn"

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |  |
| --- | --- |
| **BRANCH\_NAME** | **ASSETS** |
| Round Hill | 8000000 |

#11. Set of names of customers at "Perryridge" branch in alphabetical order

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |
| --- |
| **CUSTOMER\_NAME** |
| Adams |
| Hayes |
| Johnson |

#12. Loan data ordered by decreasing ammount then increasing loan numbers

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |  |  |
| --- | --- | --- |
| **LOAN\_NUMBER** | **BRANCH\_NAME** | **AMOUNT** |
| L-23 | Redwood | 2000 |
| L-14 | Downtown | 1500 |
| L-15 | Perryridge | 1500 |
| L-16 | Perryridge | 1300 |
| L-17 | Downtown | 1000 |
| L-11 | Round Hill | 900 |
| L-93 | Mianus | 500 |

#13. Names of branch having at least one account with average account balance

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |  |
| --- | --- |
| **BRANCH\_NAME** | **AVG(BALANCE)** |
| Round Hill | 350 |
| Mianus | 700 |
| Perryridge | 650 |
| Redwood | 700 |
| Brighton | 750 |
| Downtown | 500 |

#14. Names of branch having at least one account with size of set of customers having at least one account at that branch

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |  |
| --- | --- |
| **BRANCH\_NAME** | **COUNT(ACCOUNT\_NUMBER)** |
| Round Hill | 1 |
| Mianus | 1 |
| Perryridge | 2 |
| Redwood | 1 |
| Brighton | 1 |
| Downtown | 1 |

#15. The average balance of all accounts

"""""""""""""""""""""""""""""""""""""""""""

|  |
| --- |
| **AVG(BALANCE)** |
| 614.286 |

#16. name of branches having at least one account,with average balances of account at each branch,if that average is above 700

""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |  |
| --- | --- |
| **BRANCH\_NAME** | **AVG(BALANCE)** |
| Brighton | 750 |

#17. Names of branches having largest average balance

""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |  |
| --- | --- |
| **BRANCH\_NAME** | **BALANCE** |
| Brighton | 750 |

#18. The no of customers

"""""""""""""""""""""""""""

|  |
| --- |
| **COUNT(CUSTOMER\_NAME)** |
| 11 |

#19.Find the customers who have a loan in downtown branch

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |
| --- |
| **CUSTOMER\_NAME** |
| Williams |
| Jones |
| Jackson |

#20.Find the customers who have loan between 1500 and 2500

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |
| --- |
| **CUSTOMER\_NAME** |
| Smith |
| Hayes |
| Jackson |

#21.Find the customers who live in the city "Rye" and have a loan in the bank

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |
| --- |
| **CUSTOMER\_NAME** |
| Curry |
| Smith |

#22. Find the number of borrower in each branch

""""""""""""""""""""""""""""""""""""""""""""""""""

|  |  |
| --- | --- |
| **BRANCH\_NAME** | **COUNT(CUSTOMER\_NAME)** |
| Round Hill | 1 |
| Mianus | 1 |
| Perryridge | 2 |
| Redwood | 1 |
| Downtown | 3 |

#23. Find the Branch name having largest average loan amount

""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |  |
| --- | --- |
| **BRANCH\_NAME** | **AVG(AMOUNT)** |
| Redwood | 2000 |

#24. Find the customers name who borrows the maximum amount

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

|  |  |  |
| --- | --- | --- |
| **CUSTOMER\_NAME** | **LOAN\_NUMBER** | **AMOUNT** |
| Smith | L-23 | 2000 |

#25.Find the customers name with first letter "G"

""""""""""""""""""""""""""""""""""""""""""""""""""

|  |
| --- |
| **CUSTOMER\_NAME** |
| Glenn |
| Green |