

CSE370

Database Systems

Lab Homework-5

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Section: 06

Answer of question 1:

MariaDB [bank]> select C.customer_name, L.loan_number from

-> Customer C, Borrower B, Loan L where

-> C.customer_id = B.customer_id and

-> B.loan_number = L.loan_number and

-> L.branch_name = "Downtown";

```
MariaDB [bank]> select C.customer_name, L.loan_number from
  -> Customer C, Borrower B, Loan L where
  -> C.customer_id = B.customer_id and
  -> B.loan_number = L.loan_number and
  -> L.branch_name = "Downtown";
```

```
+-----+-----+
| customer_name | loan_number |
+-----+-----+
| Johnson       | L-14        |
| Jones         | L-17        |
| Williams      | L-17        |
+-----+-----+
3 rows in set (0.010 sec)
```

Answer of question 2:

MariaDB [bank]> select C1.customer_name as Customer1, C2.customer_name as Customer2, C1.customer_city as City from customer C1, customer C2 where C1.customer_city= C2.customer_city and C1.customer_name!=C2.customer_name group by city;

```
MariaDB [bank]> select C1.customer_name as Customer1, C2.customer_name as Customer2, C1.customer_city as City from customer C1, customer C2 where C1.customer_city= C2.customer_city and C1.customer_name!=C2.customer_name group by city;
```

Customer1	Customer2	City
Hayes	Jones	Harrison
Adams	Lindsay	Pittsfield
Curry	Smith	Rye
Green	Turner	Stamford

4 rows in set (0.003 sec)

Answer of question 3:

MariaDB [bank]> select branch_name, sum(balance*0.04) as total_interest from account group by branch_name;

```
MariaDB [bank]> select branch_name, sum(balance*0.04) as total_interest from
account group by branch_name;
```

```
+-----+-----+
| branch_name | total_interest |
+-----+-----+
| Brighton    |          66.00 |
| Downtown    |          20.00 |
| Mianus      |          28.00 |
| Perryridge  |          16.00 |
| Redwood     |          28.00 |
| Round Hill  |          14.00 |
+-----+-----+
6 rows in set (0.003 sec)
```

Answer of question 4:

MariaDB [bank]> select A.account_number,B.branch_city, MAX(A.balance) as highest_value from account A, branch B where A.branch_name = B.branch_name group by B.branch_city;

```
MariaDB [bank]> select A.account_number,B.branch_city, MAX(A.balance) as highest_value from account A, branch B where A.branch_name = B.branch_name group by B.branch_city;
```

```
+-----+-----+-----+
| account_number | branch_city | highest_value |
+-----+-----+-----+
| A-101          | Brooklyn   | 900           |
| A-102          | Horseneck  | 700           |
| A-222          | Palo Alto  | 700           |
+-----+-----+-----+
3 rows in set (0.002 sec)
```

Answer of question 5:

MariaDB [bank]> select L.loan_number,L.amount,C.customer_name from customer C, borrower B, loan L where
customer C, borrower B, loan L where

-> C.customer_id = B.customer_id and

-> B.loan_number = L.loan_number order by L.amount DESC, L.loan_number
limit 5;

```
MariaDB [bank]> select L.loan_number,L.amount,C.customer_name from customer C, borrower B, loan L where  
-> C.customer_id = B.customer_id and  
-> B.loan_number = L.loan_number order by L.amount DESC, L.loan_number limit 5;
```

loan_number	amount	customer_name
L-23	2000	Smith
L-14	1500	Johnson
L-15	1500	Hayes
L-16	1300	Adams
L-17	1000	Jones

5 rows in set (0.001 sec)

Answer of question 6:

MariaDB [bank]> select customer_name from customer C, depositor D, account A where C.customer_id=D.customer_id and A.account_number=D.account_number and A.branch_name="Perryridge" and C.customer_id in (select C.customer_id from Customer C, borrower B, loan L where C.customer_id=B.customer_id and L.loan_number =B.loan_number and L.branch_name="Perryridge");

```
MariaDB [bank]> select customer_name from customer C, depositor D, account A where C.customer_id=D.customer_id and A.account_number=D.account_number and A.branch_name="Perryridge" and C.customer_id in (select C.customer_id from Customer C, borrower B, loan L where C.customer_id=B.customer_id and L.loan_number =B.loan_number and L.branch_name="Perryridge");
```

```
+-----+
| customer_name |
+-----+
| Hayes         |
+-----+
1 row in set (0.002 sec)
```

Answer of question 7:

MariaDB [bank]> select C.customer_name, C.customer_id, SUM(L.amount) as total_loan from

-> Customer C, Borrower B, Loan L where

-> C.customer_id = B.customer_id and B.loan_number = L.loan_number

-> group by C.customer_id having count(C.customer_id) = 2;

```
MariaDB [bank]> select C.customer_name, C.customer_id, SUM(L.amount) as total_loan from
-> Customer C, Borrower B, Loan L where
-> C.customer_id = B.customer_id and B.loan_number = L.loan_number
-> group by C.customer_id having count(C.customer_id) = 2;
```

```
+-----+-----+-----+
| customer_name | customer_id | total_loan |
+-----+-----+-----+
| Smith        | C-201      | 2900      |
+-----+-----+-----+
1 row in set (0.003 sec)
```