Assignment-3

ID. 22301182

Task-01

select customer.customer_name, loan.loan_number from customer inner join borrower on customer.customer_id=borrower.customer_id inner join loan on loan.loan_number=borrower.loan_number where branch_name='Downtown';

```
MariaDB [bank]> select customer.customer_name, loan.loan_number from customer inner join borrower on customer.customer_id=borrower.customer_id inner join lo
an on loan.loan_number=borrower.loan_number where branch_name='Downtown';
+---------------+-------------+
| customer_name | loan_number |
+---------------+-------------+
| Johnson       | L-14        |
| Jones         | L-17        |
| Williams      | L-17        |
+---------------+-------------+
3 rows in set (0.000 sec)
```

Task-02

select c1.customer_name as Customer1, c2.customer_name as Customer2, c1.customer_city as City from customer c1 inner join customer c2 on c1.customer_city=c2.customer_city and c1.customer_id<c2.customer_id;

```
MariaDB [bank]> select c1.customer_name as Customer1, c2.customer_name as Customer2, c1.customer_city as City from customer c1 inner join customer c2 on c1.
customer_city=c2.customer_city and c1.customer_id<c2.customer_id;
+-----------+-----------+-----------+
| Customer1 | Customer2 | City      |
+-----------+-----------+-----------+
| Jones     | Hayes     | Harrison  |
| Smith     | Curry     | Rye       |
| Lindsay   | Adams     | Pittsfield|
| Turner    | Green     | Stamford  |
+-----------+-----------+-----------+
4 rows in set (0.000 sec)
```

Task-03

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 (0.001 sec)
```

Task-04

select a1.account_number from account a1 inner join branch b1 on a1.branch_name=b1.branch_name where a1.balance=(select max(a2.balance) from account a2 inner join branch b2 on a2.branch_name=b2.branch_name where b1.branch_city=b2.branch_city);

```
MariaDB [bank]> select a1.account_number from account a1 inner join branch b1 on a1.branch_name=b1.branch_name where a1.balance=(select max(a2.balance) from
 account a2 inner join branch b2 on a2.branch_name=b2.branch_name where b1.branch_city=b2.branch_city);
+----------------+
| account_number |
+----------------+
| A-201          |
| A-215          |
| A-222          |
+----------------+
3 rows in set (0.001 sec)
```

Task-05

select l.loan_number, l.amount as loan_amount, c.customer_name from loan l inner join borrower b on l.loan_number=b.loan_number inner join customer c on b.customer_id=c.customer_id order by l.amount desc, l.loan_number asc limit 5;

```
MariaDB [bank]> select l.loan_number, l.amount as loan_amount, c.customer_name from loan l inner join borrower b on l.loan_number=b.loan_number inner join c
ustomer c on b.customer_id=c.customer_id order by l.amount desc, l.loan_number asc limit 5;
+-------------+-------------+---------------+
| loan_number | loan_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 (0.000 sec)
```

Task-06

select distinct c.customer_name from customer c inner join depositor d on c.customer_id=d.customer_id inner join account a on d.account_number=a.account_number inner join loan l on a.branch_name=l.branch_name where a.branch_name='Perryridge' and l.branch_name='Perryridge';

```
MariaDB [bank]> select distinct c.customer_name from customer c inner join depositor d on c.customer_id=d.customer_id inner join account a on d.account_numb
er=a.account_number inner join loan l on a.branch_name=l.branch_name where a.branch_name='Perryridge' and l.branch_name='Perryridge';
+---------------+
| customer_name |
+---------------+
| Hayes         |
+---------------+
1 row in set (0.001 sec)
```

Task-07

select c.customer_name, sum(l.amount) as total_loan from customer c inner join borrower b on c.customer_id=b.customer_id inner join loan l on b.loan_number=l.loan_number group by c.customer_name having count(b.loan_number)>=2;

```
MariaDB [bank]> select c.customer_name, sum(l.amount) as total_loan from customer c inner join borrower b on c.customer_id=b.customer_id inner join loan l o
n b.loan_number=l.loan_number group by c.customer_name having count(b.loan_number)>=2;
+---------------+------------+
| customer_name | total_loan |
+---------------+------------+
| Smith         |       2900 |
+---------------+------------+
1 row in set (0.001 sec)
```