

1. SELECT c.customer_name, b.loan_number
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
WHERE l.branch_name = "Downtown";

```
mysql> SELECT c.customer_name, b.loan_number
-> 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
-> WHERE l.branch_name = "Downtown";
```

customer_name	loan_number
Johnson	L-14
Jones	L-17
Williams	L-17

```
3 rows in set (0.00 sec)
```

2. SELECT DISTINCT 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_id < c2.customer_id;

```
mysql> SELECT DISTINCT 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_id < c2.customer_id;
```

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

```
4 rows in set (0.01 sec)
```

3. SELECT branch_name, SUM(balance * 0.04) AS Total_Interest
FROM account
GROUP BY branch_name;

```
mysql> SELECT branch_name, SUM(balance * 0.04) AS Total_Interest  
-> FROM account  
-> GROUP BY branch_name;
```

branch_name	Total_Interest
Downtown	20.00
Perryridge	16.00
Brighton	66.00
Mianus	28.00
Redwood	28.00
Round Hill	14.00

6 rows in set (0.01 sec)

4. SELECT A.account_number, A.balance, B.branch_city
FROM account A
JOIN branch B ON A.branch_name = B.branch_name
WHERE balance IN (
SELECT MAX(balance)
FROM account A
JOIN branch B ON A.branch_name = B.branch_name
GROUP BY B.branch_city
);

```
mysql> SELECT A.account_number, A.balance, B.branch_city
-> FROM account A
-> JOIN branch B ON A.branch_name = B.branch_name
-> WHERE balance IN (
->     SELECT MAX(balance)
->     FROM account A
->     JOIN branch B ON A.branch_name = B.branch_name
->     GROUP BY B.branch_city
-> );
```

account_number	balance	branch_city
A-201	900	Brooklyn
A-215	700	Horseneck
A-222	700	Palo Alto

3 rows in set (0.00 sec)

5. SELECT l.loan_number, l.amount, c.customer_name
FROM loan l, borrower b, customer c
WHERE l.loan_number = b.loan_number
AND b.customer_id = c.customer_id
ORDER BY l.amount DESC, l.loan_number DESC
LIMIT 5;

```
mysql> SELECT l.loan_number, l.amount, c.customer_name
-> FROM loan l, borrower b, customer c
-> WHERE l.loan_number = b.loan_number
-> AND b.customer_id = c.customer_id
-> ORDER BY l.amount DESC, l.loan_number DESC
-> LIMIT 5;
```

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

5 rows in set (0.01 sec)

6. SELECT DISTINCT c.customer_name
 FROM customer c, depositor d, loan l
 WHERE c.customer_id = d.customer_id
 AND d.account_number IN (SELECT account_number FROM
 account WHERE branch_name = 'Perryridge')
 AND c.customer_id IN (SELECT customer_id FROM borrower
 WHERE loan_number IN (SELECT loan_number FROM loan
 WHERE branch_name = 'Perryridge'));

```
mysql> SELECT DISTINCT c.customer_name
-> FROM customer c, depositor d, loan l
-> WHERE c.customer_id = d.customer_id
-> AND d.account_number IN (SELECT account_number FROM account WHERE branch_name = 'Perryridge')
-> AND c.customer_id IN (SELECT customer_id FROM borrower WHERE loan_number IN (SELECT loan_number FROM loan WHERE branch_name = 'Perryridge'));

+-----+
| customer_name |
+-----+
| Hayes         |
+-----+
1 row in set (0.01 sec)
```

7. 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_id, c.customer_name
 HAVING COUNT(b.loan_number) >= 2;

```
mysql> 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_id, c.customer_name  
-> HAVING COUNT(b.loan_number) >= 2;
```

```
+-----+-----+  
| customer_name | total_loan |  
+-----+-----+  
| Smith          |         2900 |  
+-----+-----+
```

```
1 row in set (0.00 sec)
```