CSE370 : Database Systems

Assignment 01/02/03 | Summer 2025

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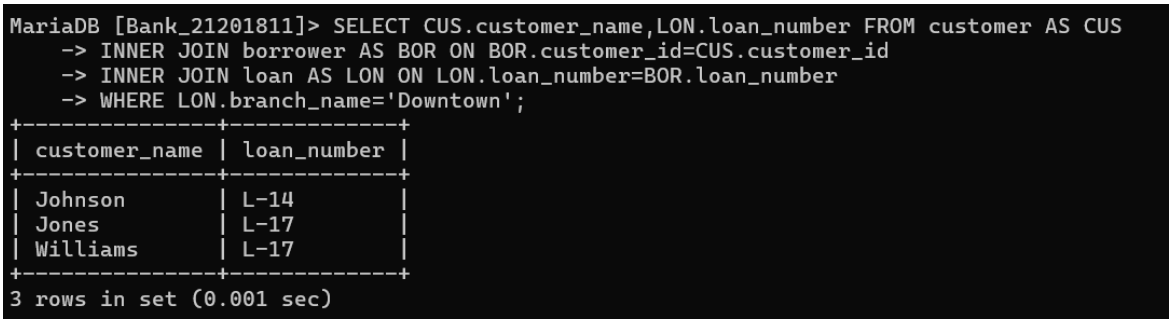
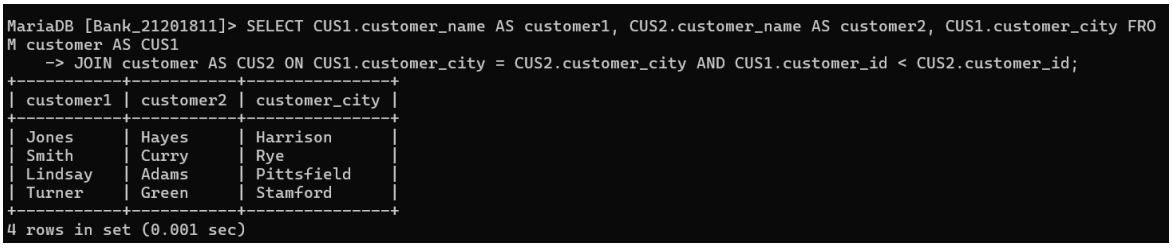
No 1 Query (as Plain Text)	SELECT CUS.customer_name,LON.loan_number FROM customer AS CUS INNER JOIN borrower AS BOR ON BOR.customer_id=CUS.customer_id INNER JOIN loan AS LON ON LON.loan_number=BOR.loan_number WHERE LON.branch_name='Downtown';
No 1 SS (of Query & Output in Shell)	
No 2 Query (as Plain Text)	SELECT CUS1.customer_name AS customer1, CUS2.customer_name AS customer2, CUS1.customer_city FROM customer AS CUS1 JOIN customer AS CUS2 ON CUS1.customer_city = CUS2.customer_city AND CUS1.customer_id < CUS2.customer_id;
No 2 SS (of Query & Output in Shell)	
No 3 Query (as Plain Text)	SELECT ACT.branch_name,SUM(0.04*ACT.balance) AS Total_Interest FROM account AS ACT GROUP BY ACT.branch_name;

No 3 SS (of Query & Output in Shell)

```
MariaDB [Bank_21201811]> SELECT ACT.branch_name,SUM(0.04*ACT.balance) AS Total_Interest FROM account AS ACT
    -> GROUP BY ACT.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)
```

No 4 Query (as Plain Text)

SELECT ACT.account_number,ACT.balance, BR.branch_city FROM account AS ACT
JOIN branch AS BR ON BR.branch_name = ACT.branch_name
WHERE (BR.branch_city, ACT.balance) IN (SELECT BR2.branch_city, MAX(ACT2.balance)
FROM account AS ACT2 JOIN branch AS BR2 ON BR2.branch_name = ACT2.branch_name
GROUP BY BR2.branch_city);

No 4 SS (of Query & Output in Shell)

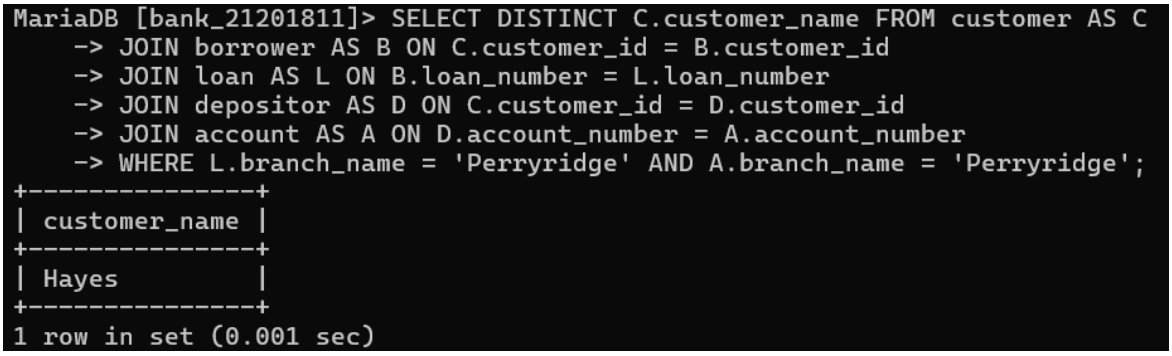
```
MariaDB [(none)]> USE bank_21201811
Database changed
MariaDB [bank_21201811]>  SELECT ACT.account_number,ACT.balance, BR.branch_city FROM account AS ACT
    -> JOIN branch AS BR ON BR.branch_name = ACT.branch_name
    -> WHERE (BR.branch_city, ACT.balance) IN ( SELECT BR2.branch_city, MAX(ACT2.balance) FROM account AS ACT2 JOIN bran
ch AS BR2 ON BR2.branch_name = ACT2.branch_name GROUP BY BR2.branch_city);
+----------------+---------+-------------+
| account_number | balance | branch_city |
+----------------+---------+-------------+
| A-201          |     900 | Brooklyn    |
| A-215          |     700 | Horseneck   |
| A-222          |     700 | Palo Alto   |
+----------------+---------+-------------+
3 rows in set (0.001 sec)
```

No 5 Query (as Plain Text)

SELECT LON.loan_number,LON.amount,CUS.customer_name from loan AS LON
INNER JOIN borrower AS BOR ON BOR.loan_number=LON.loan_number
INNER JOIN customer AS CUS ON CUS.customer_id=BOR.customer_id
ORDER BY LON.amount ASC,LON.loan_number DESC
LIMIT 5;

No 5 SS (of Query & Output in Shell)

```
MariaDB [bank_21201811]> SELECT LON.loan_number,LON.amount,CUS.customer_name from loan AS LON
    -> INNER JOIN borrower AS BOR ON BOR.loan_number=LON.loan_number
    -> INNER JOIN customer AS CUS ON CUS.customer_id=BOR.customer_id
    -> ORDER BY LON.amount ASC,LON.loan_number DESC
    -> LIMIT 5;
+-------------+--------+---------------+
| loan_number | amount | customer_name |
+-------------+--------+---------------+
| L-93        |    500 | Curry         |
| L-11        |    900 | Smith         |
| L-17        |   1000 | Jones         |
| L-17        |   1000 | Williams      |
| L-16        |   1300 | Adams         |
+-------------+--------+---------------+
5 rows in set (0.001 sec)
```

No 6 Query (as Plain Text)	SELECT DISTINCT C.customer_name FROM customer AS C JOIN borrower AS B ON C.customer_id = B.customer_id JOIN loan AS L ON B.loan_number = L.loan_number JOIN depositor AS D ON C.customer_id = D.customer_id JOIN account AS A ON D.account_number = A.account_number WHERE L.branch_name = 'Perryridge' AND A.branch_name = 'Perryridge';
No 6 SS (of Query & Output in Shell)	
No 7 Query (as Plain Text)	SELECT C.customer_name, SUM(L.amount) AS total_loan FROM customer AS C JOIN borrower AS B ON C.customer_id = B.customer_id JOIN loan AS L ON B.loan_number = L.loan_number GROUP BY C.customer_id, C.customer_name HAVING COUNT(B.loan_number) >= 2;
No 7 SS (of Query & Output in Shell)