CSE370 : Database Systems

Assignment 03 | Fall 2024

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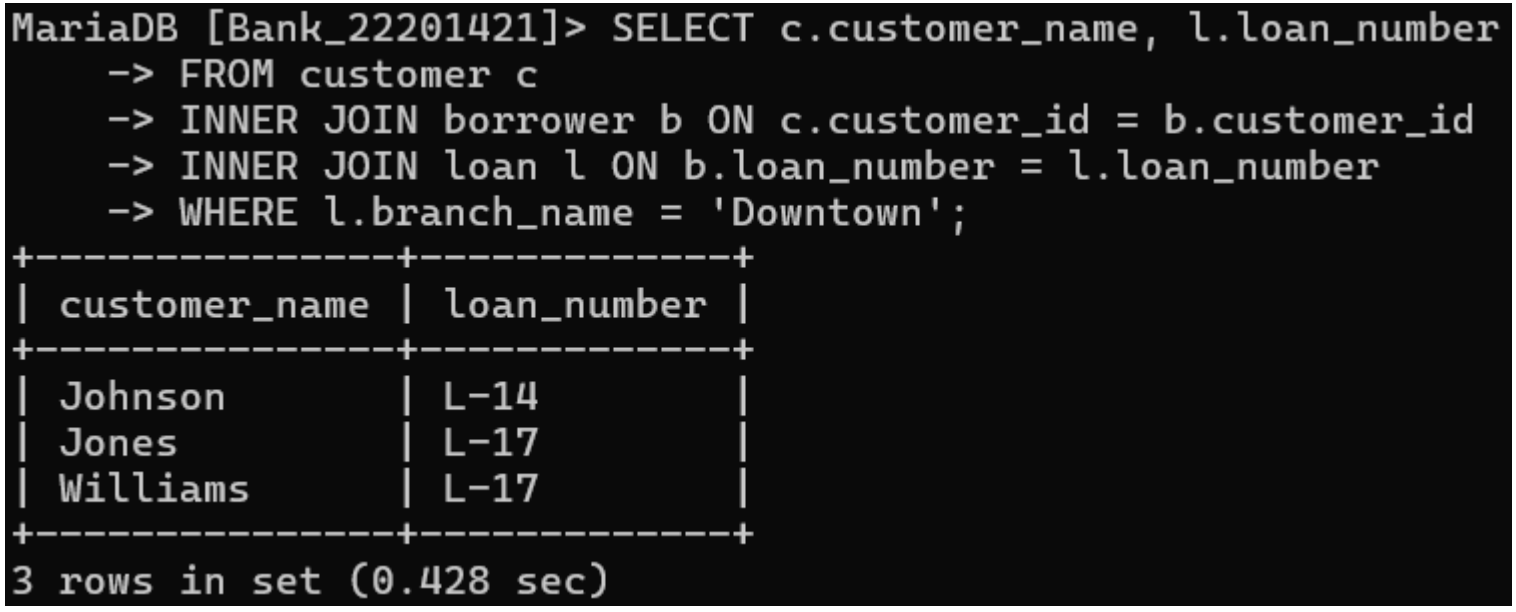
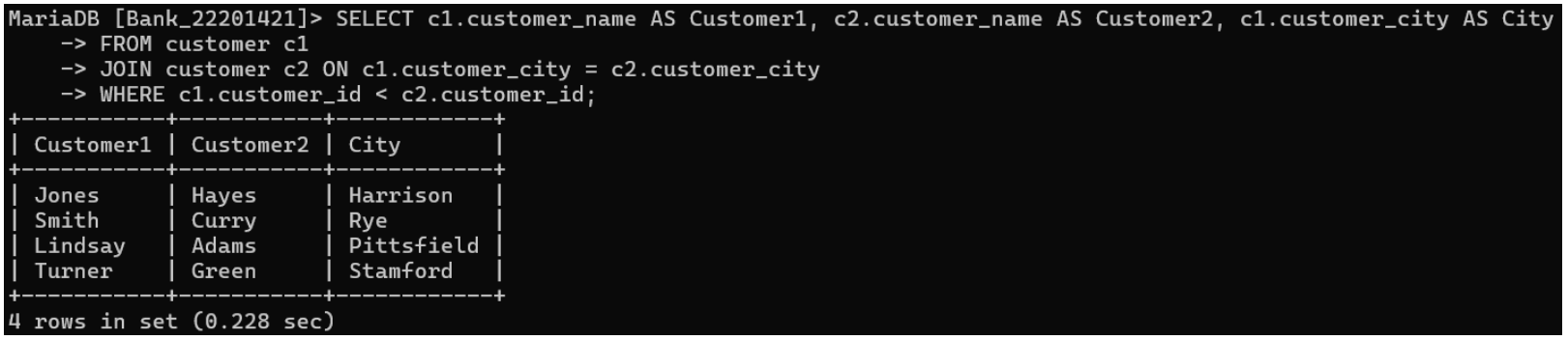
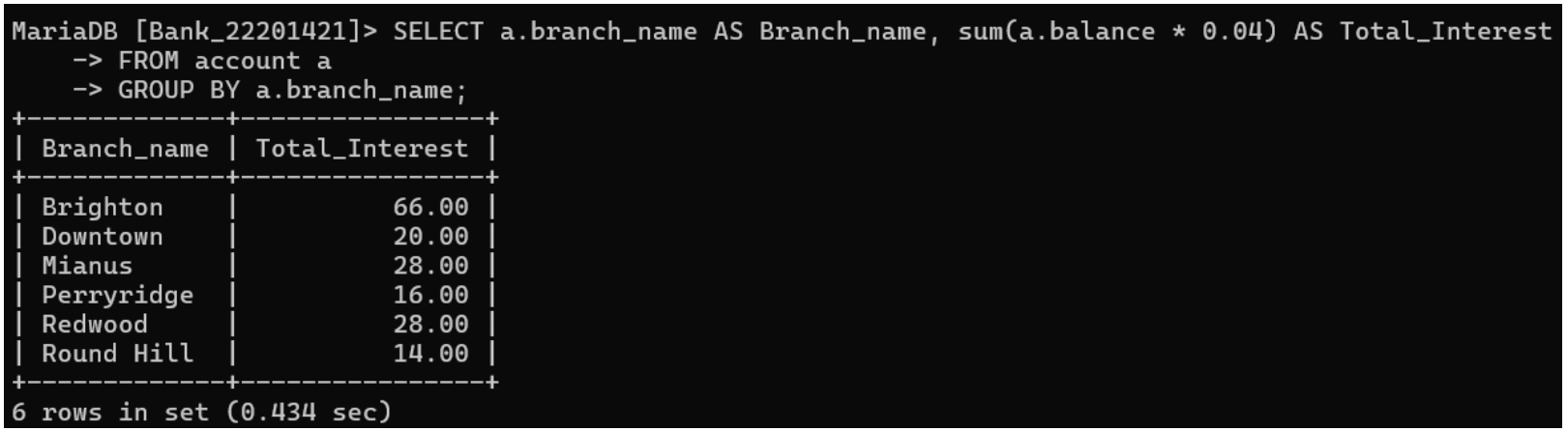
Make a PDF after completing the assignment

No 1 Query (as Plain Text)	SELECT c.customer_name, l.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';
No 1 SS (of Query & Output in Shell)	
No 2 Query	SELECT c1.customer_name AS Customer1, c2.customer_name AS Customer2, c1.customer_city AS City

(as Plain Text)	FROM Customer c1 JOIN customer c2 ON c1.customer_city = c2.customer_city WHERE c1.customer_id < c2.customer_id;
No 2 SS (of Query & Output in Shell)	
No 3 Query (as Plain Text)	SELECT a.branch_name AS Branch_name, sum(a.balance * 0.04) AS Total_Interest FROM account a GROUP BY a.branch_name;

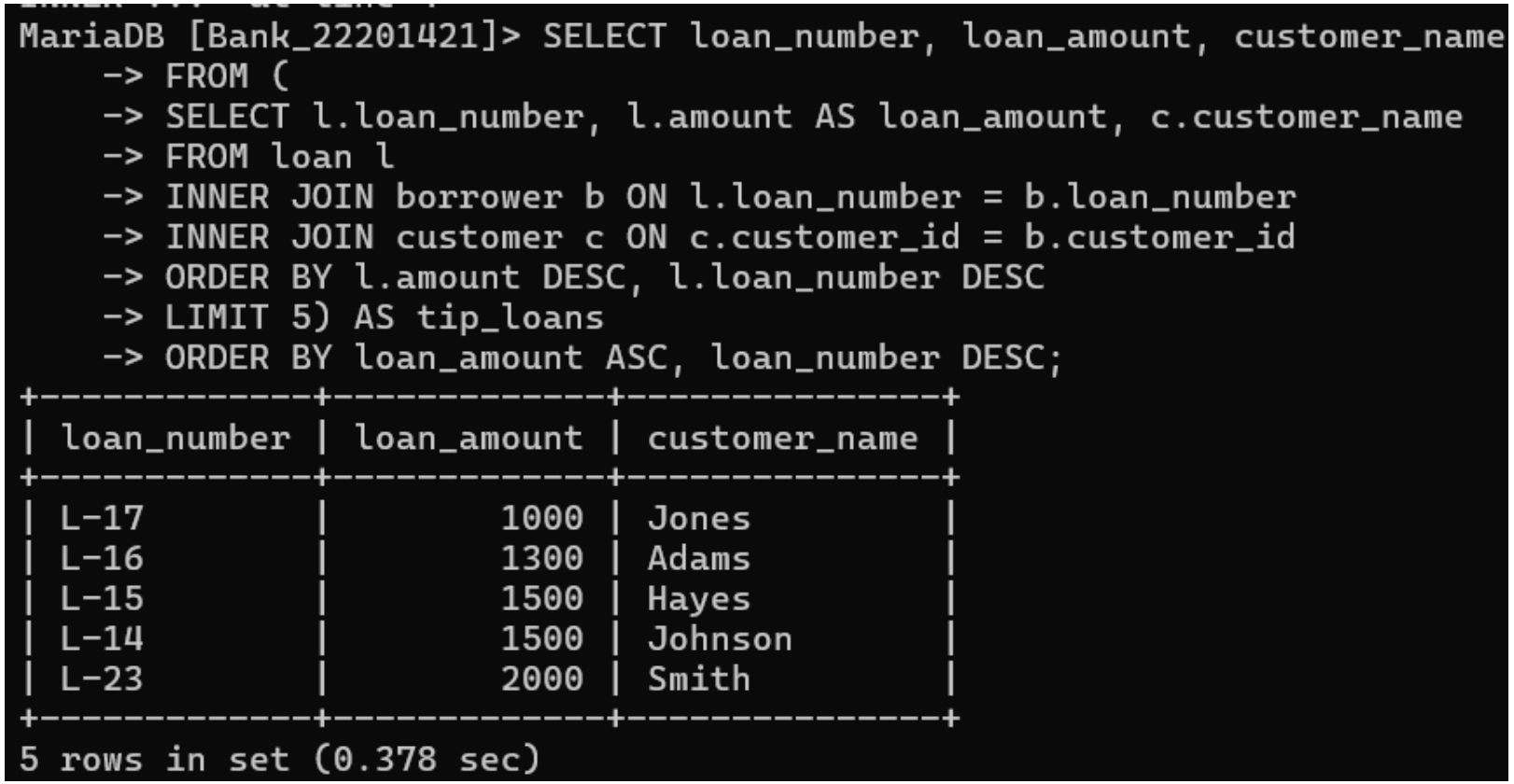
No 3 SS (of Query & Output in Shell)	
No 4 Query (as Plain Text)	SELECT c.customer_city, a.account_number, MAX(a.balance) AS highest_balance FROM customer c INNER JOIN depositor d ON c.customer_id = d.customer_id INNER JOIN account a ON a.account_number = d.account_number GROUP BY c.customer_city;

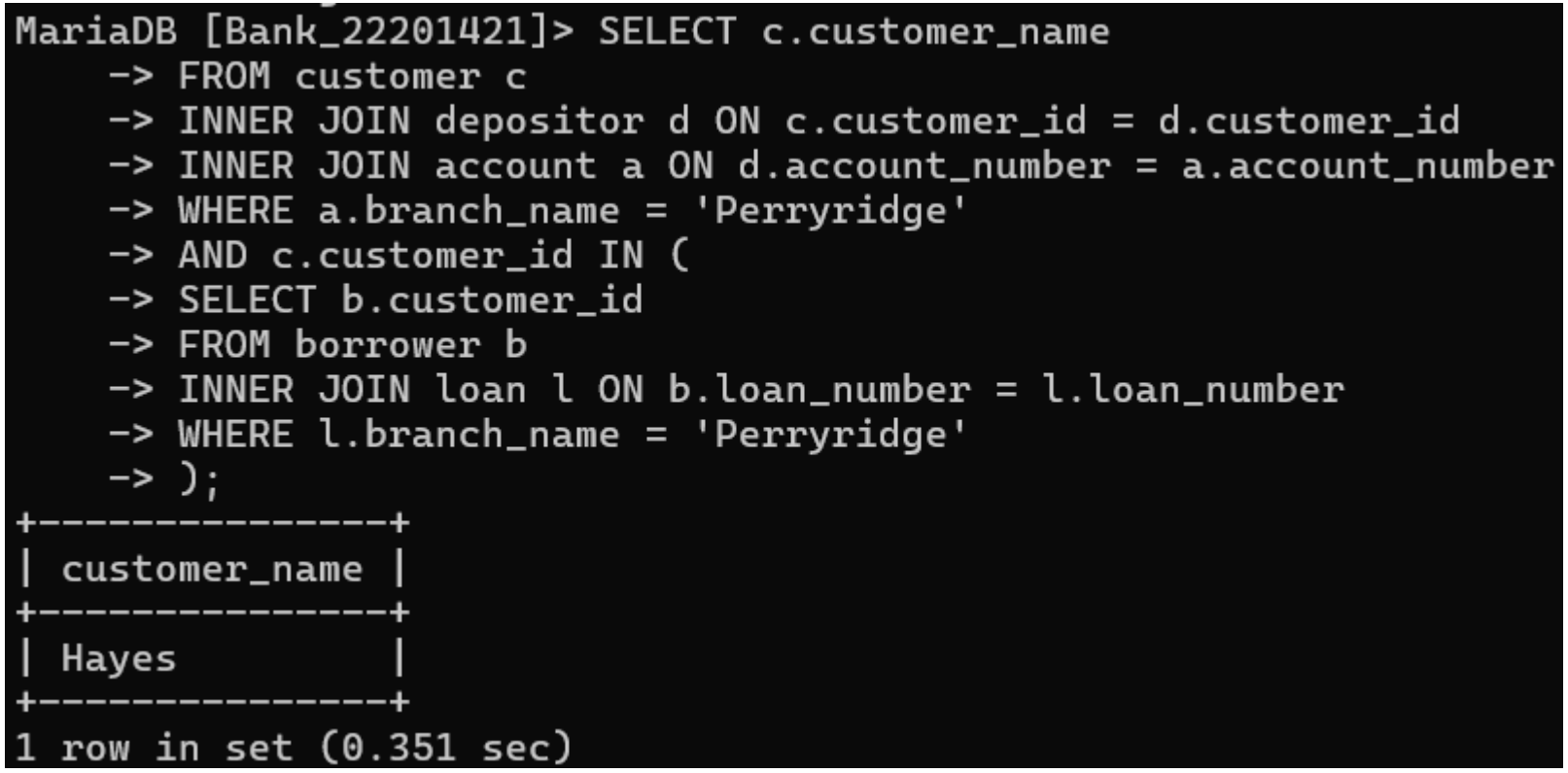
No 4 SS
(of Query & Output in Shell)

```
MariaDB [Bank_22201421]> SELECT c.customer_city, a.account_number, MAX(a.balance) AS highest_balance
    -> FROM customer c
    -> INNER JOIN depositor d ON c.customer_id = d.customer_id
    -> INNER JOIN account a ON a.account_number = d.account_number
    -> GROUP BY c.customer_city;
+---------------+----------------+-----------------+
| customer_city | account_number | highest_balance |
+---------------+----------------+-----------------+
| Harrison      | A-217          |             750 |
| Palo Alto     | A-101          |             900 |
| Pittsfield    | A-222          |             700 |
| Rye           | A-215          |             700 |
| Stamford      | A-305          |             350 |
+---------------+----------------+-----------------+
5 rows in set (1.398 sec)
```

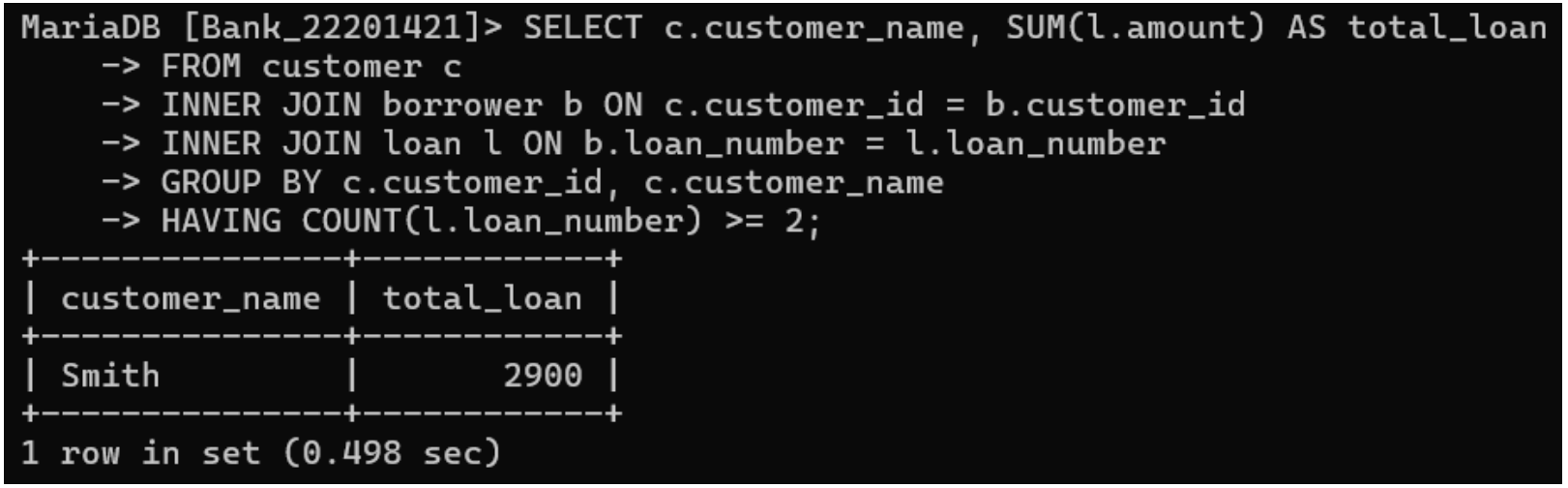
No 5 Query
(as Plain Text)

```
SELECT loan_number, loan_amount, customer_name
FROM (
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 c.customer_id = b.customer_id
ORDER BY l.amount DESC, l.loan_number DESC
LIMIT 5) AS tip_loans
ORDER BY loan_amount ASC, loan_number DESC;
```

No 5 SS (of Query & Output in Shell)	
No 6 Query (as Plain Text)	SELECT 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 WHERE a.branch_name = 'Perryridge'

	AND c.customer_id IN (SELECT b.customer_id FROM borrower b INNER JOIN loan l ON b.loan_number = l.loan_number WHERE l.branch_name = 'Perryridge');
No 6 SS (of Query & Output in Shell)	

```
MariaDB [Bank_22201421]> SELECT 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
    -> WHERE a.branch_name = 'Perryridge'
    -> AND c.customer_id IN (
    -> SELECT b.customer_id
    -> FROM borrower b
    -> INNER JOIN loan l ON b.loan_number = l.loan_number
    -> WHERE l.branch_name = 'Perryridge'
    -> );
+---------------+
| customer_name |
+---------------+
| Hayes         |
+---------------+
1 row in set (0.351 sec)
```

No 7 Query (as Plain Text)	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(l.loan_number) >= 2;
No 7 SS (of Query & Output in Shell)	

```
MariaDB [Bank_22201421]> 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(l.loan_number) >= 2;
+---------------+------------+
| customer_name | total_loan |
+---------------+------------+
| Smith         |       2900 |
+---------------+------------+
1 row in set (0.498 sec)
```