## CSE370 : Database Systems Lab Mid | Spring 2024

## **Answer Sheet**

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No 1 Query (as Plain Text)	CREATE DATABASE LabMid_20301027;
No 1 SS (of Query & Output in Shell)	MariaDB [(none)]> CREATE DATABASE LabMid_20301027; Query OK, 1 row affected (0.001 sec)
No 2 Query (as Plain Text)	USE LabMid_20301027;
No 2 SS (of Query & Output in Shell)	MariaDB [(none)]> USE LabMid_20301027; Database changed
No 3 Query (as Plain Text)	SELECT branch_name FROM loan WHERE amount < 1000;

```
No 3 SS
                     MariaDB [LabMid 20301027]> SELECT branch name
                         -> FROM loan
(of Query & Output
                         -> WHERE amount < 1000;
in Shell)
                       branch name
                       Round Hill
                       Mianus
                       rows in set (0.000 sec)
No 4 Query
                     SELECT CONCAT(customer_street, ', ', customer_city) AS customer_address
(as Plain Text)
                     FROM customer
                     WHERE customer_name LIKE '%y';
No 4 SS
                     MariaDB [LabMid_20301027]> SELECT CONCAT(customer_street, ', ', customer
(of Query & Output
                     city) AS customer address
                         -> FROM customer
in Shell)
                         -> WHERE customer name LIKE '%y';
                       customer address
                       North, Rye
                       Park, Pittsfield
                      2 rows in set (0.000 sec)
No 5 Query
(as Plain Text)
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No 5 SS (of Query & Output in Shell)	
No 6 Query (as Plain Text)	SELECT customer_city, COUNT(*) AS customer_count FROM customer GROUP BY customer_city;
No 6 SS (of Query & Output in Shell)	<pre>MariaDB [LabMid_20301027]&gt; SELECT customer_city, COUNT(*) AS customer_co unt     -&gt; FROM customer     -&gt; GROUP BY customer_city; +</pre>
	Brooklyn
	++ 8 rows in set (0.001 sec)
No 7 Query (as Plain Text)	SELECT DISTINCT b1.branch_name FROM branch b1 WHERE b1.assets > (SELECT MAX(b2.assets) FROM branch b2 WHERE b2.branch_city = 'Brooklyn');

No 7 SS (of Query & Output in Shell)	<pre>MariaDB [LabMid_20301027]&gt; SELECT DISTINCT b1.branch_name     -&gt; FROM branch b1     -&gt; WHERE b1.assets &gt; (SELECT MAX(b2.assets) FROM branch b2 WHERE b2. branch_city = 'Brooklyn'); Empty set (0.001 sec)</pre>
No 8 Query (as Plain Text)	SELECT branch.branch_name, GROUP_CONCAT(customer.customer_name ORDER BY customer.customer_name) AS customer_names FROM branch LEFT JOIN depositor ON branch.branch_name = depositor.branch_name LEFT JOIN customer ON depositor.customer_id = customer.customer_id GROUP BY branch.branch_name;
No 8 SS (of Query & Output in Shell)	
No 9 Query (as Plain Text)	SELECT branch_name FROM account GROUP BY branch_name HAVING AVG(balance) >= 600;

```
No 9 SS
(of Query & Output
in Shell)
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No 10 Query
(as Plain Text)

SELECT loan_number, customer_name, amount
FROM (
SELECT loan_number, customer_name, amount,
ROW_NUMBER() OVER (ORDER BY amount DESC, loan_number DESC) AS row_num
FROM loan
JOIN borrower ON loan.loan_number = borrower.loan_number
JOIN customer ON borrower.customer_id = customer.customer_id
)
AS ranked
WHERE row_num <= 5;
```

```
No 10 SS
(of Query & Output
in Shell)
```

```
MariaDB [LabMid_20301027]> SELECT loan_number, customer_name, amount
    -> FROM (
    -> SELECT loan_number, customer_name, amount,
    -> ROW_NUMBER() OVER (ORDER BY amount DESC, loan_number DESC) AS row_num
    -> FROM loan
    -> JOIN borrower ON loan.loan_number = borrower.loan_number
    -> JOIN customer ON borrower.customer_id = customer.customer_id
    -> )
    -> AS ranked
    -> WHERE row_num <= 5;
ERROR 1052 (23000): Column 'loan_number' in field list is ambiguous
MariaDB [LabMid_20301027]> __
```