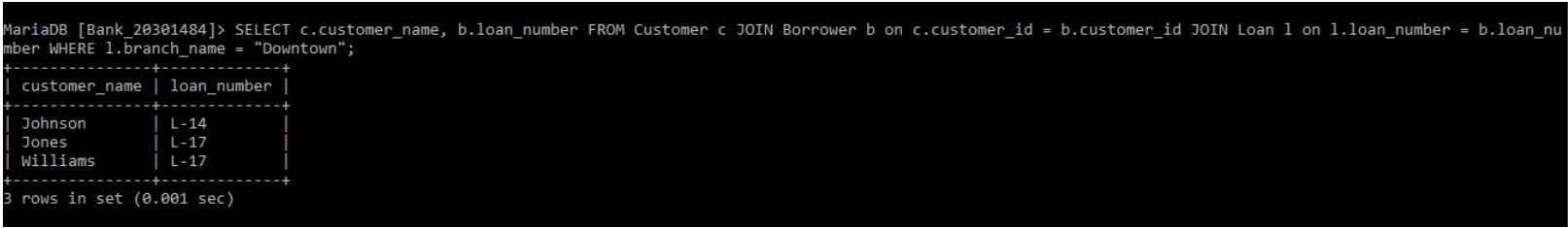
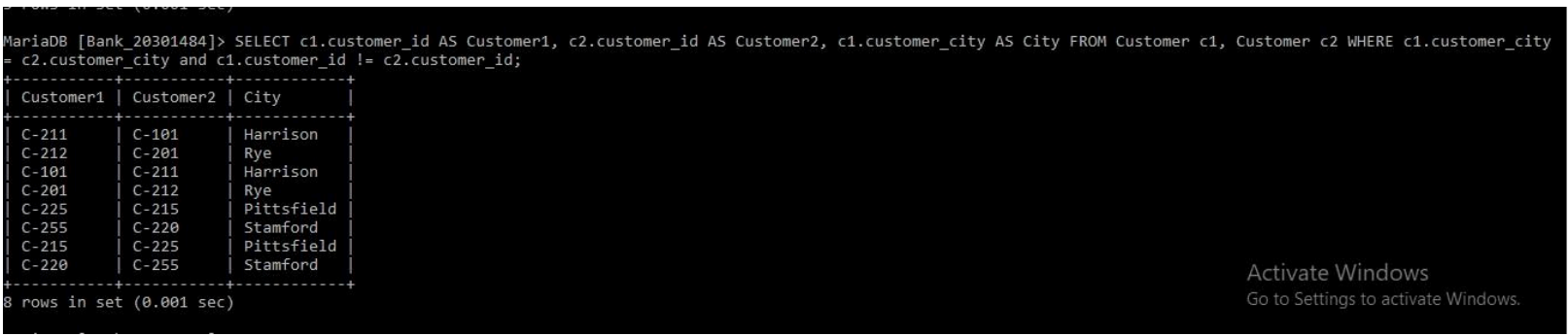


## CSE370 : Database Systems

### Assignment 03 | Fall 2024

ID : 20301484 | Name : Mohammad Muntasir Kabir

<b>No 1 Query</b> (as Plain Text)	SELECT c.customer_name, b.loan_number FROM Customer c JOIN Borrower b on c.customer_id = b.customer_id JOIN Loan l on l.loan_number = b.loan_number WHERE l.branch_name = "Downtown";
<b>No 1 SS</b> (of Query & Output in Shell)	
<b>No 2 Query</b> (as Plain Text)	SELECT c1.customer_id AS Customer1, c2.customer_id 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;
<b>No 2 SS</b> (of Query & Output in Shell)	
<b>No 3 Query</b> (as Plain Text)	SELECT a.branch_name, a.balance + a.balance * 0.04 AS Total_Interest FROM Account a GROUP BY a.branch_name;

<b>No 3 SS</b> <b>(of Query &amp; Output</b> <b>in Shell)</b>	<pre> MariaDB [Bank_20301484]&gt; SELECT a.branch_name, a.balance + a.balance * 0.04 AS Total_Interest FROM Account a GROUP BY a.branch_name; +-----+-----+   branch_name   Total_Interest   +-----+-----+   Brighton      936.00             Downtown      520.00             Mianus         728.00             Perryridge    416.00             Redwood       728.00             Round Hill    364.00           +-----+-----+ 6 rows in set (0.002 sec) </pre>
<b>No 4 Query</b> <b>(as Plain Text)</b>	<p>SELECT a1.account_number FROM Account a1, Branch b WHERE a1.branch_name = b.branch_name and a1.balance = (SELECT MAX(a2.balance) FROM Account a2, Branch b2 WHERE a2.branch_name = b2.branch_name and b2.branch_city = b.branch_city);</p>
<b>No 4 SS</b> <b>(of Query &amp; Output</b> <b>in Shell)</b>	<pre> MariaDB [Bank_20301484]&gt; SELECT a1.account_number FROM Account a1, Branch b WHERE a1.branch_name = b.branch_name and a1.balance = (SELECT MAX(a2.balance) FROM Account a2, Branch b2 WHERE a2.branch_name = b2.branch_name and b2.branch_city = b.branch_city); +-----+   account_number   +-----+   A-201              A-215              A-222            +-----+ 3 rows in set (0.002 sec) </pre> <p>Activate Windows Go to Settings to activate Windows.</p>
<b>No 5 Query</b> <b>(as Plain Text)</b>	<p>SELECT * FROM (SELECT l.loan_number, l.amount, c.customer_name FROM Loan l, Customer c, Borrower b WHERE c.customer_id = b.customer_id and b.loan_number = l.loan_number ORDER BY l.amount DESC LIMIT 5) AS TABLE_1 ORDER BY amount, loan_number DESC;</p>

<div>No 5 SS (of Query &amp; Output in Shell)</div>	<div>MariaDB [Bank_20301484]&gt; SELECT * FROM (SELECT l.loan_number, l.amount, c.customer_name FROM Loan l, Customer c, Borrower b WHERE c.customer_id = b.customer_id and b.loan_number = l.loan_number ORDER BY l.amount DESC LIMIT 5) AS TABLE_1 ORDER BY amount, loan_number DESC;</div> <table><thead><tr><th>loan_number</th><th>amount</th><th>customer_name</th></tr></thead><tbody><tr><td>L-17</td><td>1000</td><td>Jones</td></tr><tr><td>L-16</td><td>1300</td><td>Adams</td></tr><tr><td>L-15</td><td>1500</td><td>Hayes</td></tr><tr><td>L-14</td><td>1500</td><td>Johnson</td></tr><tr><td>L-23</td><td>2000</td><td>Smith</td></tr></tbody></table> <div>5 rows in set (0.001 sec)</div>	loan_number	amount	customer_name	L-17	1000	Jones	L-16	1300	Adams	L-15	1500	Hayes	L-14	1500	Johnson	L-23	2000	Smith
loan_number	amount	customer_name																	
L-17	1000	Jones																	
L-16	1300	Adams																	
L-15	1500	Hayes																	
L-14	1500	Johnson																	
L-23	2000	Smith																	
<div>No 6 Query (as Plain Text)</div>	<div>SELECT DISTINCT c.customer_name FROM Customer c, Depositor d, Borrower b, Loan l, Account a WHERE a.branch_name = l.branch_name and l.branch_name = "Perryridge" and a.account_number = d.account_number and l.loan_number = b.loan_number and d.customer_id = b.customer_id and b.customer_id = c.customer_id;</div>																		
<div>No 6 SS (of Query &amp; Output in Shell)</div>	<div>MariaDB [Bank_20301484]&gt; SELECT DISTINCT c.customer_name FROM Customer c, Depositor d, Borrower b, Loan l, Account a WHERE a.branch_name = l.branch_name and l.branch_name = "Perryridge" and a.account_number = d.account_number and l.loan_number = b.loan_number and d.customer_id = b.customer_id and b.customer_id = c.customer_id;</div> <table><thead><tr><th>customer_name</th></tr></thead><tbody><tr><td>Hayes</td></tr></tbody></table> <div>1 row in set (0.001 sec)</div> <div>Activate Windows Go to Settings to activate Windows.</div>	customer_name	Hayes																
customer_name																			
Hayes																			
<div>No 7 Query (as Plain Text)</div>	<div>SELECT c.customer_name, SUM(l.amount) AS total_loan FROM Customer c, Loan l, Borrower b WHERE c.customer_id = b.customer_id and b.loan_number = l.loan_number and c.customer_id IN (SELECT b2.customer_id FROM Borrower b2 GROUP BY b2.customer_id HAVING COUNT(*) &gt;= 2) GROUP BY c.customer_name;</div>																		
<div>No 7 SS (of Query &amp; Output in Shell)</div>	<div>MariaDB [Bank_20301484]&gt; SELECT c.customer_name, SUM(l.amount) AS total_loan FROM Customer c, Loan l, Borrower b WHERE c.customer_id = b.customer_id and b.loan_number = l.loan_number and c.customer_id IN (SELECT b2.customer_id FROM Borrower b2 GROUP BY b2.customer_id HAVING COUNT(*) &gt;= 2) GROUP BY c.customer_name;</div> <table><thead><tr><th>customer_name</th><th>total_loan</th></tr></thead><tbody><tr><td>Smith</td><td>2900</td></tr></tbody></table> <div>1 row in set (0.002 sec)</div> <div>Activate Windows Go to Settings to activate Windows.</div>	customer_name	total_loan	Smith	2900														
customer_name	total_loan																		
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