

CSE370 : Database Systems

Assignment 01/02/03 | Summer 2025

ID : <8 Digit Student ID> | Name : Full Official Name

No 1 Query (as Plain Text)	select c.customer_name, b.loan_number from borrower b join loan l on b.loan_number = l.loan_number join customer c on b.customer_id = c.customer_id where l.branch_name = 'downtown';															
No 1 SS (of Query & Output in Shell)	<pre>MariaDB [Bank_22299079]> select c.customer_name, b.loan_number from borrower b join loan l on b.loan_number = l.loan_number join customer c on b.customer_id = c.customer_id where l.branch_name = 'downtown';</pre> <table><tr><th>customer_name</th><th>loan_number</th></tr><tr><td>Johnson</td><td>L-14</td></tr><tr><td>Jones</td><td>L-17</td></tr><tr><td>Williams</td><td>L-17</td></tr></table> <pre>3 rows in set (0.001 sec)</pre>	customer_name	loan_number	Johnson	L-14	Jones	L-17	Williams	L-17							
customer_name	loan_number															
Johnson	L-14															
Jones	L-17															
Williams	L-17															
No 2 Query (as Plain Text)	select c1.customer_name as customer1, c2.customer_name as customer2, c1.customer_city as city from customer c1 join customer c2 on c1.customer_city = c2.customer_city and c1.customer_id < c2.customer_id;															
No 2 SS (of Query & Output in Shell)	<pre>MariaDB [Bank_22299079]> select c1.customer_name as customer1, c2.customer_name as customer2, c1.customer_city as city from customer c1 join customer c2 on c1.customer_city = c2.customer_city and c1.customer_id < c2.customer_id;</pre> <table><tr><th>customer1</th><th>customer2</th><th>city</th></tr><tr><td>Jones</td><td>Hayes</td><td>Harrison</td></tr><tr><td>Smith</td><td>Curry</td><td>Rye</td></tr><tr><td>Lindsay</td><td>Adams</td><td>Pittsfield</td></tr><tr><td>Turner</td><td>Green</td><td>Stamford</td></tr></table> <pre>4 rows in set (0.001 sec)</pre>	customer1	customer2	city	Jones	Hayes	Harrison	Smith	Curry	Rye	Lindsay	Adams	Pittsfield	Turner	Green	Stamford
customer1	customer2	city														
Jones	Hayes	Harrison														
Smith	Curry	Rye														
Lindsay	Adams	Pittsfield														
Turner	Green	Stamford														

No 3 Query (as Plain Text)	select branch_name, sum(balance * (4/100)) as total_interest from account group by branch_name;
No 3 SS (of Query & Output in Shell)	<pre> MariaDB [Bank_22299079]> select branch_name, sum(balance * (4/100)) as total_interest from account gro up by branch_name; +-----+-----+ branch_name total_interest +-----+-----+ Brighton 66.0000 Downtown 20.0000 Mianus 28.0000 Perryridge 16.0000 Redwood 28.0000 Round Hill 14.0000 +-----+-----+ 6 rows in set (0.001 sec) </pre>
No 4 Query (as Plain Text)	SELECT cust.customer_city, acc.account_number, acc.balance FROM account AS acc JOIN depositor AS dep ON acc.account_number = dep.account_number JOIN customer AS cust ON dep.customer_id = cust.customer_id WHERE (cust.customer_city, acc.balance) IN (SELECT cust2.customer_city, MAX(acc2.balance) FROM account AS acc2 JOIN depositor AS dep2 ON acc2.account_number = dep2.account_number JOIN customer AS cust2 ON dep2.customer_id = cust2.customer_id GROUP BY cust2.customer_city);

No 4 SS
(of Query & Output
in Shell)

```
MariaDB [Bank_22299079]> SELECT cust.customer_city, acc.account_number, acc.balance FROM account AS ac
c JOIN depositor AS dep ON acc.account_number = dep.account_number JOIN customer AS cust ON dep.custom
er_id = cust.customer_id WHERE (cust.customer_city, acc.balance) IN (SELECT cust2.customer_city, MAX(a
cc2.balance) FROM account AS acc2 JOIN depositor AS dep2 ON acc2.account_number = dep2.account_number
JOIN customer AS cust2 ON dep2.customer_id = cust2.customer_id GROUP BY cust2.customer_city );
```

customer_city	account_number	balance
Harrison	A-217	750
Rye	A-215	700
Pittsfield	A-222	700
Stamford	A-305	350
Palo Alto	A-201	900

5 rows in set (0.001 sec)

No 5 Query
(as Plain Text)

```
select l.loan_number, l.amount, c.customer_name from loan l join borrower b on l.loan_number = b.loan_number join
customer c on b.customer_id = c.customer_id order by l.amount desc, l.loan_number asc limit 5;
```

No 5 SS
(of Query & Output
in Shell)

```
MariaDB [Bank_22299079]> select l.loan_number, l.amount, c.customer_name from loan l join borrower b o
n l.loan_number = b.loan_number join customer c on b.customer_id = c.customer_id order by l.amount des
c, l.loan_number asc limit 5;
```

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

5 rows in set (0.001 sec)

No 6 Query (as Plain Text)	select distinct c.customer_name from customer c join depositor d on c.customer_id = d.customer_id join account a on d.account_number = a.account_number join borrower b on c.customer_id = b.customer_id join loan l on b.loan_number = l.loan_number where a.branch_name = 'perryridge' and l.branch_name = 'perryridge';
No 6 SS (of Query & Output in Shell)	<pre> MariaDB [Bank_22299079]> select distinct c.customer_name from customer c join depositor d on c.customer_id = d.customer_id join account a on d.account_number = a.account_number join borrower b on c.customer_id = b.customer_id join loan l on b.loan_number = l.loan_number where a.branch_name = 'perryridge' and l.branch_name = 'perryridge'; +-----+ customer_name +-----+ Hayes +-----+ 1 row in set (0.001 sec) </pre>
No 7 Query (as Plain Text)	select c.customer_name, sum(l.amount) as total_loan from borrower b join loan l on b.loan_number = l.loan_number join customer c on b.customer_id = c.customer_id group by b.customer_id having count(b.loan_number) >= 2;
No 7 SS (of Query & Output in Shell)	<pre> MariaDB [Bank_22299079]> select c.customer_name, sum(l.amount) as total_loan from borrower b join loan l on b.loan_number = l.loan_number join customer c on b.customer_id = c.customer_id group by b.customer_id having count(b.loan_number) >= 2; +-----+-----+ customer_name total_loan +-----+-----+ Smith 2900 +-----+-----+ 1 row in set (0.001 sec) MariaDB [Bank_22299079]> </pre>

