CSE370 : Database Systems

Assignment 03 | Fall 2024

ID : 22201998 | Name : MD. TAZBID HASAN

No 1 Query (as Plain Text)	SELECT customer.customer_name, loan.loan_number FROM ((loan INNER JOIN borrower ON loan.loan_number = borrower.loan_number) INNER JOIN customer ON borrower.customer_id = customer.customer_id) WHERE loan.branch_name = "Downtown";
No 1 SS (of Query & Output in Shell)	MariaDB [Bank_22201998]> SELECT customer.customer_name, loan.loan_number FROM ((loan INNER JOIN borrower ON loan.loan_number = borrower.loan_number) INNER JOIN customer ON borrower.customer_id = customer.customer_id) WHERE loan.branch_name = "Downtown"; +---------------+-------------+ | customer_name | loan_number | +---------------+-------------+ | Johnson | L-14 | | Jones | L-17 | | Williams | L-17 | +---------------+-------------+ 3 rows in set (0.016 sec) MariaDB [Bank_22201998]>
No 2 Query (as Plain Text)	SELECT L1.customer_name AS Customer1, L2.customer_name AS Customer2, L1.customer_city AS City FROM customer L1, customer L2 WHERE L1.customer_city = L2.customer_city AND L1.customer_id > L2.customer_id;
No 2 SS (of Query & Output in Shell)	MariaDB [Bank_22201998]> SELECT L1.customer_name AS Customer1, L2.customer_name AS Customer2, L1.customer_city AS City FROM customer L1, customer L2 WHERE L1.customer_city = L2.customer_city AND L1.customer_id > L2.customer_id; +-----------+-----------+-----------+ | Customer1 | Customer2 | City | +-----------+-----------+-----------+ | Hayes | Jones | Harrison | | Curry | Smith | Rye | | Adams | Lindsay | Pittsfield | | Green | Turner | Stamford | +-----------+-----------+-----------+ 4 rows in set (0.007 sec) MariaDB [Bank_22201998]>
No 3 Query (as Plain Text)	SELECT branch.branch_name AS Branch_name, SUM(account.balance*0.04) AS Total_Interest FROM branch LEFT JOIN account ON branch.branch_name = account.branch_name GROUP BY branch.branch_name;

| **No 3 SS**<br>**(of Query & Output in Shell)** | ```
MariaDB [Bank_22201998]> SELECT branch.branch_name AS Branch_name, SUM(account.balance*0.04) AS Total_Interest FROM branch LEFT JOIN account ON branch.branc
h_name = account.branch_name GROUP BY branch.branch_name;
+-------------+----------------+
| Branch_name | Total_Interest |
+-------------+----------------+
| Brighton    |          66.00 |
| Downtown    |          20.00 |
| Mianus      |          28.00 |
| North Town  |           NULL |
| Perryridge  |          16.00 |
| Pownal      |           NULL |
| Redwood     |          28.00 |
| Round Hill  |          14.00 |
+-------------+----------------+
8 rows in set (0.010 sec)

MariaDB [Bank_22201998]>
``` |
| | |
| **No 4 Query**
(as Plain Text) | SELECT account.account_number FROM ((account INNER JOIN depositor ON account.account_number = depositor.account_number) INNER JOIN customer ON depositor.customer_id = customer.customer_id) GROUP BY customer.customer_city HAVING MAX(account.balance); |
| **No 4 SS**<br>**(of Query & Output in Shell)** | ```
MariaDB [Bank_22201998]> SELECT account.account_number FROM ((account INNER JOIN depositor ON account.account_number = d
epositor.account_number) INNER JOIN customer ON depositor.customer_id = customer.customer_id) GROUP BY customer.customer
_city HAVING MAX(account.balance);
+----------------+
| account_number |
+----------------+
| A-217          |
| A-101          |
| A-222          |
| A-215          |
| A-305          |
+----------------+
5 rows in set (0.102 sec)

MariaDB [Bank_22201998]>
``` |
| | |
| **No 5 Query**
(as Plain Text) | SELECT loan.loan_number, loan.amount, customer.customer_name FROM ((loan INNER JOIN borrower ON loan.loan_number = borrower.loan_number) INNER JOIN customer ON borrower.customer_id = customer.customer_id) ORDER BY loan.amount ASC, loan.loan_number DESC LIMIT 5; |

| **No 5 SS**<br>**(of Query & Output**<br>**in Shell)** | ```
MariaDB [Bank_22201998]> SELECT loan.loan_number, loan.amount, customer.customer_name FROM ((loan INNER JOIN borrower ON loan.loan_number = borrower.loan_nu
mber) INNER JOIN customer ON borrower.customer_id = customer.customer_id) ORDER BY loan.amount ASC, loan.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)

MariaDB [Bank_22201998]> |
``` |
| | |
| **No 6 Query**
(as Plain Text) | SELECT customer.customer_name FROM ((loan INNER JOIN borrower ON loan.loan_number = borrower.loan_number AND loan.branch_name = "Perryridge") INNER JOIN customer ON borrower.customer_id = customer.customer_id); |
| **No 6 SS**<br>**(of Query & Output**<br>**in Shell)** | ```
MariaDB [Bank_22201998]> SELECT customer.customer_name FROM ((loan INNER JOIN borrower ON loan.loan_number = borrower.loan_number AND loan.branch_name = "Pe
rryridge") INNER JOIN customer ON borrower.customer_id = customer.customer_id);
+---------------+
| customer_name |
+---------------+
| Hayes         |
| Adams         |
+---------------+
2 rows in set (0.079 sec)

MariaDB [Bank_22201998]>
``` |
| | |
| **No 7 Query**
(as Plain Text) | SELECT customer.customer_name, SUM(loan.amount) AS total_loan FROM ((loan INNER JOIN borrower ON loan.loan_number = borrower.loan_number) INNER JOIN customer ON borrower.customer_id = customer.customer_id) GROUP BY customer.customer_name HAVING COUNT(loan.loan_number) > 1; |
| **No 7 SS**<br>**(of Query & Output**<br>**in Shell)** | ```
MariaDB [Bank_22201998]> SELECT customer.customer_name, SUM(loan.amount) AS total_loan FROM ((loan INNER JOIN borrower ON loan.loan_number = borrower.loan_n
umber) INNER JOIN customer ON borrower.customer_id = customer.customer_id) GROUP BY customer.customer_name HAVING COUNT(loan.loan_number) > 1;
+---------------+------------+
| customer_name | total_loan |
+---------------+------------+
| Smith         |       2900 |
+---------------+------------+
1 row in set (0.001 sec)

MariaDB [Bank_22201998]>
``` |
| | |