**ASSIGNMENT -1 (BANKING SYSTEM)**

**Tasks 2: Select, Where, Between, AND, LIKE:**

1. **Insert at least 10 sample records into each of the following tables. • Customers • Accounts • Transactions**

**INSERTION FOR CUSTOMERS TABLE**

INSERT INTO customers (customer\_id, first\_name, last\_name, DOB, email, phone\_number, address)

VALUES (1, 'Harini', 'Rajasekaran', '2003-07-02', 'harini.r@gmail.com', '9876543210', '123 Main St');

INSERT INTO customers

VALUES (2, 'Haresh', 'Rahul', '2004-01-09', 'hareshrahul@gmail.com', '9123456780', '456 Banyan St');

INSERT INTO customers (customer\_id, first\_name, last\_name, DOB, email, phone\_number, address)

VALUES

(3, 'Harry', 'Styles', '1998-02-01', 'styles.harry@gmail.com', '9998887776', '789 Maple St'),

(4, 'Max', 'Verstappen', '1997-09-30', 'max.f1@gmail.com', '8765432109', '101 Oak St'),

(5, 'Stefan', 'Salvatore', '1980-05-18', 'stefan.s@gmail.com', '7654321098', '202 Pine St');

INSERT INTO customers (customer\_id, first\_name, last\_name, DOB, email, phone\_number, address)

VALUES (6, 'Taylor', 'Swift', '1989-09-30', NULL, NULL, '303 Willow St');

INSERT INTO customers VALUES

(7, 'Jon', 'Snow', '1987-04-08', 'Jon.S@gmail.com', '9012345678', '505 Neem St'),

(8, 'Fiona', 'Gallagar', '1993-12-19', 'fiona.g@gmail.com', '8123456789', '606 Walnut St'),

(9, 'Derek', 'Sheperd', '1982-08-05', 'derek.s@gmail.com', '7234567890', '707 Teak St'),

(10, 'Meredith', 'Grey', '1998-02-14', 'dr.grey@gmail.com', '6345678901', '808 Redwood St');

**INSERTION FOR ACCOUNTS TABLE**

INSERT INTO accounts (account\_id, customer\_id, account\_type, balance)

VALUES (1, 1, 'savings', 5000.00);

INSERT INTO accounts values(2,2,'current',15000.00);

INSERT INTO accounts (account\_id, customer\_id, account\_type, balance)

VALUES

(3, 3, 'zero\_balance', 0.00),

(4, 4, 'savings', 7500.75),

(5, 5, 'current', 30000.00),

(6, 6, 'savings', 2000.50),

(7, 7, 'zero\_balance', 0.00),

(8, 8, 'current', 15000.20),

(9, 9, 'savings', 9500.90),

(10, 10, 'savings', 4000.00);

**INSERTION FOR TRANSACTIONS TABLE:**

INSERT INTO transactions (transaction\_id, account\_id, transaction\_type, amount, transaction\_date)

VALUES (1, 1, 'deposit', 1000.00, '2025-03-01');

INSERT INTO transactions (transaction\_id, account\_id, transaction\_type, amount)

VALUES (2, 2, 'withdrawal', 500.00);

INSERT INTO transactions VALUES (3, 3, 'deposit', 2000.00, '2025-03-02');

INSERT INTO transactions (transaction\_id, account\_id, transaction\_type, amount, transaction\_date)

VALUES

(4, 4, 'withdrawal', 1000.00, '2025-03-03'),

(5, 5, 'transfer', 2500.00, '2025-03-04'),

(6, 6, 'deposit', 1500.00, '2025-03-05'),

(7, 7, 'withdrawal', 800.00, '2025-03-06'),

(8, 8, 'transfer', 3500.00, '2025-03-07'),

(9, 9, 'deposit', 500.00, '2025-03-08'),

(10, 10, 'withdrawal', 200.00, current\_date()-1);

**SQL queries:**

**1. Write a SQL query to retrieve the name, account type and email of all customers.**

1.SELECT first\_name, last\_name, email, account\_type FROM customers, accounts

WHERE customers.customer\_id = accounts.customer\_id;

**2. Write a SQL query to list all transaction corresponding customer.**

2. SELECT first\_name, last\_name, transaction\_id, transaction\_type, amount, transaction\_date

FROM customers, accounts, transactions

WHERE customers.customer\_id = accounts.customer\_id

AND accounts.account\_id = transactions.account\_id;

**3. Write a SQL query to increase the balance of a specific account by a certain amount.**

3. UPDATE accounts SET balance = balance + 5000 WHERE account\_id = 1;

**4. Write a SQL query to Combine first and last names of customers as a full\_name**

4. SELECT CONCAT(first\_name, ' ', last\_name) AS full\_name FROM customers;

**5. Write a SQL query to remove accounts with a balance of zero where the account type is savings.**

5. DELETE FROM accounts WHERE balance = 0 AND account\_type = 'savings';

**6. Write a SQL query to Find customers living in a specific city**

6. SELECT \* FROM customers WHERE address LIKE '%Oak%';

**7. Write a SQL query to Get the account balance for a specific account.**

7. SELECT balance FROM accounts

WHERE account\_id = 5;

**8. Write a SQL query to List all current accounts with a balance greater than $1,000.**

8. SELECT \* FROM accounts

WHERE account\_type = 'current' AND balance > 1000;

**9. Write a SQL query to Retrieve all transactions for a specific account.**

9. SELECT \* FROM transactions

WHERE account\_id = 8;

**10. Write a SQL query to Calculate the interest accrued on savings accounts based on a given interest rate**

10. SELECT account\_id, balance, (balance \* 0.05) AS interest\_accrued

FROM accounts WHERE account\_type = 'savings';

**11. Write a SQL query to Identify accounts where the balance is less than a specified overdraft limit.**

11. SELECT \* FROM accounts WHERE balance < 0;

**12. Write a SQL query to Find customers not living in a specific city.**

12. SELECT \* FROM customers WHERE address NOT LIKE '%Pine%';