SQL CASE STUDY – BANKING SERVICES BY DATA IN MOTION

CREATE TABLE Customers (

CustomerID SERIAL PRIMARY KEY,

FirstName VARCHAR(100),

LastName VARCHAR(100),

Email VARCHAR(100)

);

CREATE TABLE AccountTypes (

AccountTypeID SERIAL PRIMARY KEY,

AccountTypeName VARCHAR(100)

);

CREATE TABLE Accounts (

AccountID SERIAL PRIMARY KEY,

CustomerID INT REFERENCES Customers(CustomerID),

AccountTypeID INT REFERENCES AccountTypes(AccountTypeID),

Balance DECIMAL(18, 2)

);

CREATE TABLE Transactions (

TransactionID SERIAL PRIMARY KEY,

AccountID INT REFERENCES Accounts(AccountID),

TransactionDate DATE,

Amount DECIMAL(18, 2)

);

--Inserting some sample data

INSERT INTO Customers(FirstName, LastName, Email) VALUES

('John', 'Doe', 'john.doe@example.com'),

('Jane', 'Doe', 'jane.doe@example.com'),

('Jim', 'Smith', 'jim.smith@example.com');

INSERT INTO AccountTypes(AccountTypeName) VALUES

('Savings'),

('Current');

INSERT INTO Accounts(CustomerID, AccountTypeID, Balance) VALUES

(1, 1, 10000.00),

(1, 2, 5000.00),

(2, 1, 20000.00),

(2, 2, 10000.00),

(3, 1, 15000.00),

(3, 2, 7500.00);

INSERT INTO Transactions(AccountID, TransactionDate, Amount) VALUES

(1, '2023-01-01', 500.00),

(1, '2023-01-15', -200.00),

(1, '2023-02-01', 500.00),

(1, '2023-02-15', -200.00),

(2, '2023-01-01', 200.00),

(2, '2023-01-15', -100.00),

(2, '2023-02-01', 200.00),

(2, '2023-02-15', -100.00),

(3, '2023-01-01', 1000.00),

(3, '2023-01-15', -500.00),

(3, '2023-02-01', 1000.00),

(3, '2023-02-15', -500.00);

CREATE TABLE AccountStatus (

AccountStatusID SERIAL PRIMARY KEY,

AccountID INT REFERENCES Accounts(AccountID),

Status VARCHAR(50),

StatusDate DATE

);

--Inserting some additional data

INSERT INTO Customers(FirstName, LastName, Email) VALUES

('Jack', 'Johnson', 'jack.johnson@example.com'),

('Jill', 'Johnson', 'jill.johnson@example.com'),

('Tom', 'Cruise', 'tom.cruise@example.com');

INSERT INTO AccountTypes(AccountTypeName) VALUES

('Investment'),

('Loan');

INSERT INTO Accounts(CustomerID, AccountTypeID, Balance) VALUES

(4, 1, 30000.00),

(4, 3, 15000.00),

(5, 1, 25000.00),

(5, 4, -10000.00),

(6, 2, 20000.00),

(6, 3, 12000.00);

INSERT INTO Transactions(AccountID, TransactionDate, Amount) VALUES

(4, '2023-03-01', 1500.00),

(4, '2023-03-15', -700.00),

(4, '2023-04-01', 1500.00),

(4, '2023-04-15', -700.00),

(5, '2023-03-01', 1250.00),

(5, '2023-03-15', -600.00),

(5, '2023-04-01', 1250.00),

(5, '2023-04-15', -600.00),

(6, '2023-03-01', 2000.00),

(6, '2023-03-15', -1000.00),

(6, '2023-04-01', 2000.00),

(6, '2023-04-15', -1000.00);

INSERT INTO AccountStatus(AccountID, Status, StatusDate) VALUES

(1, 'Active', '2023-01-01'),

(1, 'Suspended', '2023-02-01'),

(1, 'Active', '2023-03-01'),

(2, 'Active', '2023-01-01'),

(2, 'Closed', '2023-04-01'),

(3, 'Active', '2023-01-01'),

(4, 'Active', '2023-02-01'),

(5, 'Active', '2023-02-01'),

(6, 'Active', '2023-03-01');