CREATE TABLE Farmers (

Farmer\_ID INT PRIMARY KEY,

Farmer\_Name VARCHAR(100),

District VARCHAR(50),

Cooperative\_ID INT,

CONSTRAINT fk\_Cooperative FOREIGN KEY (Cooperative\_ID) REFERENCES Cooperatives(Cooperative\_ID)

);

-- Creating the Cooperatives table

CREATE TABLE Cooperatives (

Cooperative\_ID INT PRIMARY KEY,

Cooperative\_Name VARCHAR(100),

Location VARCHAR(100),

Number\_of\_Members INT,

Manager\_ID INT,

CONSTRAINT fk\_Manager FOREIGN KEY (Manager\_ID) REFERENCES Managers(Manager\_ID)

);

-- Creating the Managers table

CREATE TABLE Managers (

Manager\_ID INT PRIMARY KEY,

Manager\_Name VARCHAR(100),

Cooperative\_ID INT,

CONSTRAINT fk\_Cooperative\_Manager FOREIGN KEY (Cooperative\_ID) REFERENCES Cooperatives(Cooperative\_ID)

);

-- Creating the FarmRecords table

CREATE TABLE FarmRecords (

Plot\_ID INT PRIMARY KEY,

Farmer\_ID INT,

Plot\_Name VARCHAR(100),

Geographical\_Location VARCHAR(100),

CONSTRAINT fk\_Farmer FOREIGN KEY (Farmer\_ID) REFERENCES Farmers(Farmer\_ID)

);

-- Creating the SalesRecords table

CREATE TABLE SalesRecords (

Transaction\_ID INT PRIMARY KEY,

Farmer\_ID INT,

Plot\_ID INT,

Cooperative\_ID INT,

Quantity\_Sold\_KG DECIMAL(10, 2),

Sales\_Amount\_RWF DECIMAL(10, 2),

CONSTRAINT fk\_Farmer\_Sales FOREIGN KEY (Farmer\_ID) REFERENCES Farmers(Farmer\_ID),

CONSTRAINT fk\_Plot FOREIGN KEY (Plot\_ID) REFERENCES FarmRecords(Plot\_ID),

CONSTRAINT fk\_Cooperative\_Sales FOREIGN KEY (Cooperative\_ID) REFERENCES Cooperatives(Cooperative\_ID)

);

-- Creating the Buyers table

CREATE TABLE Buyers (

Buyer\_ID INT PRIMARY KEY,

Buyer\_Name VARCHAR(100),

Business\_Detail VARCHAR(100),

Purchase\_Date DATE,

Quantity\_Bought\_KG DECIMAL(10, 2),

Cooperative\_ID INT,

CONSTRAINT fk\_Cooperative\_Buyer FOREIGN KEY (Cooperative\_ID) REFERENCES Cooperatives(Cooperative\_ID)

);

INSERT INTO Farmers (Farmer\_ID, Farmer\_Name, District, Cooperative\_ID) VALUES

(1, 'Alice Johnson', 'Kigali', 1),

(2, 'Brian Mwenda', 'Musanze', 1),

(3, 'Clara Niyonsaba', 'Huye', 2),

(4, 'David Mugenzi', 'Rubavu', 2),

(5, 'Eva Uwase', 'Kigali', 3),

(6, 'Frank Ndayisaba', 'Ngoma', 3),

(7, 'Grace Muneza', 'Kigali', 4),

(8, 'Hassan Bizimana', 'Muhanga', 4),

(9, 'Irene Umutoni', 'Kigali', 5),

(10, 'Jules Nkurunziza', 'Nyagatare', 5);

-- Inserting sample values into Cooperatives table

INSERT INTO Cooperatives (Cooperative\_ID, Cooperative\_Name, Location, Number\_of\_Members, Manager\_ID) VALUES

(1, 'Kigali Farmers Union', 'Kigali', 150, 1),

(2, 'Musanze Agricultural Cooperative', 'Musanze', 80, 3),

(3, 'Huye Cooperative Network', 'Huye', 60, 5),

(4, 'Rubavu Agricultural Co-op', 'Rubavu', 100, 7),

(5, 'Ngoma Farmers Cooperative', 'Ngoma', 120, 9);

-- Inserting sample values into Managers table

INSERT INTO Managers (Manager\_ID, Manager\_Name, Cooperative\_ID) VALUES

(1, 'Samuel Nyamutera', 1),

(2, 'Miriam Mutoni', 2),

(3, 'James Ndayambaje', 3),

(4, 'Sylvia Nkubito', 4),

(5, 'Patricia Mutesi', 5);

-- Inserting sample values into FarmRecords table

INSERT INTO FarmRecords (Plot\_ID, Farmer\_ID, Plot\_Name, Geographical\_Location) VALUES

(1, 1, 'Plot A1', 'Sector 1, Kigali'),

(2, 2, 'Plot B1', 'Sector 2, Musanze'),

(3, 3, 'Plot C1', 'Sector 3, Huye'),

(4, 4, 'Plot D1', 'Sector 4, Rubavu'),

(5, 5, 'Plot E1', 'Sector 5, Kigali'),

(6, 6, 'Plot F1', 'Sector 6, Ngoma'),

(7, 7, 'Plot G1', 'Sector 7, Kigali'),

(8, 8, 'Plot H1', 'Sector 8, Muhanga'),

(9, 9, 'Plot I1', 'Sector 9, Kigali'),

(10, 10, 'Plot J1', 'Sector 10, Nyagatare');

-- Inserting sample values into SalesRecords table

INSERT INTO SalesRecords (Transaction\_ID, Farmer\_ID, Plot\_ID, Cooperative\_ID, Quantity\_Sold\_KG, Sales\_Amount\_RWF) VALUES

(1, 1, 1, 1, 50, 200000),

(2, 2, 2, 1, 30, 120000),

(3, 3, 3, 2, 20, 80000),

(4, 4, 4, 2, 15, 60000),

(5, 5, 5, 3, 40, 160000),

(6, 6, 6, 3, 25, 100000),

(7, 7, 7, 4, 60, 240000),

(8, 8, 8, 4, 35, 140000),

(9, 9, 9, 5, 45, 180000),

(10, 10, 10, 5, 50, 200000);

-- Inserting sample values into Buyers table

INSERT INTO Buyers (Buyer\_ID, Buyer\_Name, Business\_Detail, Purchase\_Date, Quantity\_Bought\_KG, Cooperative\_ID) VALUES

(1, 'Market Wholesale', 'Kigali', '2024-11-15', 50, 1),

(2, 'Local Grocery', 'Musanze', '2024-11-16', 30, 1),

(3, 'Huye Market', 'Huye', '2024-11-17', 20, 2),

(4, 'Rubavu Traders', 'Rubavu', '2024-11-18', 15, 2),

(5, 'Kigali Vendors', 'Kigali', '2024-11-19', 40, 3),

(6, 'Ngoma Suppliers', 'Ngoma', '2024-11-20', 25, 3),

(7, 'Central Kigali Store', 'Kigali', '2024-11-21', 60, 4),

(8, 'Muhanga Supplies', 'Muhanga', '2024-11-21', 35, 4),

(9, 'Kigali Grocers', 'Kigali', '2024-11-22', 45, 5),

(10, 'Nyagatare Traders', 'Nyagatare', '2024-11-22', 50, 5);