Homework 3 (Bank Case Study) (Cruz Chavez)

Schema: (Primary Keys in **Bold**. Foreign Keys in *Italics*)

Bank

|  |  |  |
| --- | --- | --- |
| **Bank ID** | Bank Name | HQ Address |

Banch

|  |  |  |
| --- | --- | --- |
| **Branch ID** | Phone # | Branch Location |
| *Bank ID* |  |  |

Account

|  |  |  |  |
| --- | --- | --- | --- |
| **Acount ID** | Account Balance | Account Currency | Account Type |
| *Branch ID* |  |  |  |

Loan

|  |  |  |
| --- | --- | --- |
| **Loan ID** | Loan Amount | Loan Year |
| *Branch ID* |  |  |

LoanCustomer

|  |  |
| --- | --- |
| **SSN** | **Loan ID** |

CustomerAccount

|  |  |
| --- | --- |
| **SSN** | **Account ID** |

Customer

|  |  |  |  |
| --- | --- | --- | --- |
| **SSN** | Customer Address | DOB | Customer Name |

Transaction

|  |  |  |  |
| --- | --- | --- | --- |
| **Transaction ID** | Transaction Time | Transaction Type | Transaction Amount |
| *Account ID* | *SSN* |  |  |

CREATE TABLE Bank (

BankID int auto-increment not null,

BankName varchar(30),

HQAddress varchar(30),

PRIMARY KEY (BankID))

Engine=InnoDB;

CREATE TABLE Customer (

SSN int not null,

CustomerAddress varchar(30),

DOB varchar(10),

CustomerName varchar(20),

PRIMARY KEY (SSN))

Engine=InnoDB;

CREATE TABLE Branch (

BranchID int auto-increment not null,

PhoneNumber varchar(15),

BranchLocation varchar(40),

PRIMARY KEY (BranchID),

FOREIGN KEY (BankID) references Bank (BankID))

Engine=InnoDB;

CREATE TABLE Loan (

LoanID int auto-increment not null,

LoanAmount numeric(12,2),

LoanYear numeric(4,0),

Command Script:

PRIMARY KEY (LoanID),

FOREIGN KEY (BranchID) references Branch (BranchID))

Engine=InnoDB;

CREATE TABLE Account (

AccountID int auto-increment not null,

AccountBalance numeric(12,2),

AccountCurrency varchar(20),

AccountType varchar(20),

PRIMARY KEY (AccountID),

FOREIGN KEY (BranchID) references Branch (BranchID))

Engine=InnoDB;

CREATE TABLE Transaction (

TransacionID int auto-increment not null,

TransactionTime varchar(6),

TransactionType varchar(20),

TransactionAmount numeric (12,2),

PRIMARY KEY (TransactionID),

FOREIGN KEY (AccountID) references Account (AccountID),

FOREIGN KEY (SSN) references Customer (SSN))

Engine=InnoDB;

CREATE TABLE LoanCustomer (

SSN int,

LoanID int,

PRIMARY KEY (SSN, LoanID),

FOREIGN KEY (SSN) references Customer (SSN),

FOREIGN KEY (LoanID) references Loan (LoanID))

Engine=InnoDB;

CREATE TABLE CustomerAccount (

SSN int,

AccountID int,

PRIMARY KEY (SSN, AccountID),

FOREIGN KEY (SSN) references Customer (SSN),

FOREIGN KEY (AccountID) references Account (AccountID))

Engine=InnoDB;

INSERT into Bank values (null, ‘RBFCU’, ‘1111 Austin Way’);

INSERT into Bank values (null, ‘All American’, ‘3345 Shebbaro St.’);

INSERT into Bank values (null, ‘Cena Currency Keeping’, ‘1237 AA Ave.’);

INSERT into Bank values (null, ‘Joeseph A. Bank’, ‘3457 Suite Dr.’);

INSERT into Bank values (null, ‘IBC’, ‘3389 Jefferson Alcove’);

INSERT into Bank values (null, ‘Monopoloma’, ‘5680 Morgan Freeway’);

INSERT into Bank values (null, ‘New Dealer’, ‘9034 Roosevelt Parkway’);

INSERT into Bank values (null, ‘Thrash Bank’, ‘3465 Rolling Stone’);

INSERT into Bank values (null, ‘Jackson Credit Union’, ‘3535 Billie Jean Rd.’);

INSERT into Bank values (null, ‘Bank of America’, ‘7845 Avenue of the Americas’);

INSERT into Customer values (102125677, ‘4567 Aliditas Way’, ‘01/01/1998’, ‘Trip Bradshaw’);

INSERT into Customer values (102125678, ‘7777 Boring Dr.’, ‘01/02/1998’, ‘Michael Cole’);

INSERT into Customer values (102125679, ‘123 Eversaw St.’, ‘01/03/1998’, ‘Jack Rose’);

INSERT into Customer values (102125687, ‘0023 Thomas’, ‘01/04/1998’, ‘Mark Jericho’);

INSERT into Customer values (102125688, ‘6767 DeusMach Ave.’, ‘01/05/1998’, ‘Warrior’);

INSERT into Customer values (102125689, ‘4567 Aliditas Ave.’, ‘01/06/1998’, ‘Ric Hardy’);

INSERT into Customer values (102125690, ‘4567 Aliditas Dr.’, ‘01/07/1998’, ‘Shelton Hass’);

INSERT into Customer values (102125691, ‘4567 Aliditas St.’, ‘01/08/1998’, ‘Kofi Langston’);

INSERT into Customer values (102125692, ‘8585 Darson Way’, ‘01/09/1998’, ‘Xavier Lawler’);

INSERT into Customer values (102125693, ‘9001 Epic Dr.’, ‘01/10/1998’, ‘Nikki Lynch’);

INSERT into Branch values (null, ‘210-876-9000’, ‘San Antonio’, 1);

INSERT into Branch values (null, ‘619-876-9001’, ‘San Diego’, 2);

INSERT into Branch values (null, ‘512-876-9002’, ‘Austin’, 3);

INSERT into Branch values (null, ‘915-876-9003’, ‘El Paso’, 4);

INSERT into Branch values (null, ‘210-876-9004’, ‘San Antonio’, 5);

INSERT into Branch values (null, ‘210-876-9005’, ‘San Antonio’, 6);

INSERT into Branch values (null, ‘915-876-9006’, ‘El Paso’, 7);

INSERT into Branch values (null, ‘512-876-9007’, ‘Austin’, 8);

INSERT into Branch values (null, ‘619-876-9008’, ‘San Diego’, 9);

INSERT into Branch values (null, ‘813-876-9010’, ‘Tampa’, 10);

INSERT into Loan values (null, 100, 2017, 1);

INSERT into Loan values (null, 200, 2017, 2);

INSERT into Loan values (null, 300, 2017, 2);

INSERT into Loan values (null, 400, 2017, 3);

INSERT into Loan values (null, 500, 2017, 4);

INSERT into Loan values (null, 600, 2017, 5);

INSERT into Loan values (null, 700, 2017, 7);

INSERT into Loan values (null, 800, 2017, 8);

INSERT into Loan values (null, 900, 2017, 9);

INSERT into Loan values (null, 1000, 2017, 10);

INSERT into Account values (null, 10000, ‘Dollars’, ‘Checking’, 2);

INSERT into Account values (null, 20000, ‘Dollars’, ‘Savings’, 2);

INSERT into Account values (null, 30000, ‘Euros’, ‘Checking’, 1);

INSERT into Account values (null, 40000, ‘Pesos’, ‘Savings’, 3);

INSERT into Account values (null, 50000, ‘Yen’, ‘Savings’, 5);

INSERT into Account values (null, 60000, ‘Dollars’, ‘Checking’, 6);

INSERT into Account values (null, 70000, ‘Pounds’, ‘Checking’, 9);

INSERT into Account values (null, 80000, ‘Yen’, ‘Checking’, 7);

INSERT into Account values (null, 90000, ‘Dollars’, ‘Checking’, 7);

INSERT into Account values (null, 100000, ‘Dollars’, ‘Savings’, 10);

INSERT into Transaction values (null, ‘1:30pm’, ‘Credit’, 12.50, 1, 102125677);

INSERT into Transaction values (null, ‘2:30pm’, ‘Debit’, 25.50, 2, 102125677);

INSERT into Transaction values (null, ‘3:30pm’, ‘Debit’, 50, 3, 102125679);

INSERT into Transaction values (null, ‘4:30pm’, ‘Credit’, 75, 4, 102125687);

INSERT into Transaction values (null, ‘5:30pm’, ‘Debit’, 100, 5, 102125688);

INSERT into Transaction values (null, ‘6:30pm’, ‘Debit’, 120, 6, 102125689);

INSERT into Transaction values (null, ‘7:30pm’, ‘Credit’, 135, 7, 102125690);

INSERT into Transaction values (null, ‘8:30pm’, ‘Credit’, 150, 8, 102125691);

INSERT into Transaction values (null, ‘9:30pm’, ‘Credit’, 175, 9, 102125692);

INSERT into Transaction values (null, ‘10:30pm’, ‘Debit’, 200, 10, 102125693);

INSERT into LoanCustomer values (102125693, 2);

INSERT into LoanCustomer values (102125693, 3);

INSERT into LoanCustomer values (102125692, 1);

INSERT into LoanCustomer values (102125691, 4);

INSERT into LoanCustomer values (102125690, 5);

INSERT into LoanCustomer values (102125689, 6);

INSERT into LoanCustomer values (102125688, 7);

INSERT into LoanCustomer values (102125687, 8);

INSERT into LoanCustomer values (102125679, 9);

INSERT into LoanCustomer values (102125677, 10);

INSERT into CustomerAccount values (102125693, 1);

INSERT into CustomerAccount values (102125693, 2);

INSERT into CustomerAccount values (102125692, 3);

INSERT into CustomerAccount values (102125691, 4);

INSERT into CustomerAccount values (102125690, 5);

INSERT into CustomerAccount values (102125689, 6);

INSERT into CustomerAccount values (102125688, 7);

INSERT into CustomerAccount values (102125687, 8);

INSERT into CustomerAccount values (102125679, 9);

INSERT into CustomerAccount values (102125677, 10);