create database one;

use one;

CREATE TABLE branch (

branch\_name VARCHAR(50) PRIMARY KEY,

branch\_city VARCHAR(50) NOT NULL,

assets\_amt DECIMAL(15, 2) CHECK (assets\_amt >= 0)

);

CREATE TABLE customer (

cust\_name VARCHAR(50) PRIMARY KEY,

cust\_street VARCHAR(50),

cust\_city VARCHAR(50)

);

CREATE TABLE Account (

Acc\_no INT PRIMARY KEY,

branch\_name VARCHAR(50) NOT NULL,

balance DECIMAL(10, 2) CHECK (balance >= 0),

FOREIGN KEY (branch\_name) REFERENCES branch(branch\_name)

);

CREATE TABLE Depositor (

cust\_name VARCHAR(50),

acc\_no INT,

PRIMARY KEY (cust\_name, acc\_no),

FOREIGN KEY (cust\_name) REFERENCES customer(cust\_name),

FOREIGN KEY (acc\_no) REFERENCES Account(Acc\_no)

);

CREATE TABLE Loan (

Acc\_no INT,

loan\_no INT PRIMARY KEY,

branch\_name VARCHAR(50) NOT NULL,

amount DECIMAL(10, 2) CHECK (amount > 0),

FOREIGN KEY (Acc\_no) REFERENCES Account(Acc\_no),

FOREIGN KEY (branch\_name) REFERENCES branch(branch\_name)

);

CREATE TABLE Borrower (

cust\_name VARCHAR(50),

loan\_no INT,

PRIMARY KEY (cust\_name, loan\_no),

FOREIGN KEY (cust\_name) REFERENCES customer(cust\_name),

FOREIGN KEY (loan\_no) REFERENCES Loan(loan\_no)

);

INSERT INTO branch (branch\_name, branch\_city, assets\_amt) VALUES

('Pimpri', 'Pune', 5000000),

('Akurdi', 'Pune', 3000000),

('Hinjewadi', 'Pune', 7000000),

('Baner', 'Pune', 4500000),

('Kothrud', 'Pune', 3500000);

INSERT INTO customer (cust\_name, cust\_street, cust\_city) VALUES

('Alice', 'MG Road', 'Pune'),

('Bob', 'JM Road', 'Pune'),

('Charlie', 'FC Road', 'Pune'),

('David', 'East Street', 'Pune'),

('Eva', 'Baner Road', 'Pune'),

('Frank', 'Aundh Road', 'Pune'),

('Grace', 'Shivaji Nagar', 'Pune'),

('Hannah', 'Kothrud', 'Pune'),

('Isaac', 'Hinjewadi', 'Pune'),

('Jack', 'Pimpri', 'Pune');

INSERT INTO Account (Acc\_no, branch\_name, balance) VALUES

(1001, 'Pimpri', 15000),

(1002, 'Akurdi', 8000),

(1003, 'Hinjewadi', 20000),

(1004, 'Baner', 5000),

(1005, 'Kothrud', 12000),

(1006, 'Pimpri', 25000),

(1007, 'Akurdi', 18000),

(1008, 'Baner', 6000),

(1009, 'Kothrud', 14000),

(1010, 'Hinjewadi', 22000);

INSERT INTO Depositor (cust\_name, acc\_no) VALUES

('Alice', 1001),

('Bob', 1002),

('Charlie', 1003),

('David', 1004),

('Eva', 1005),

('Frank', 1006),

('Grace', 1007),

('Hannah', 1008),

('Isaac', 1009),

('Jack', 1010);

INSERT INTO Loan (Acc\_no, loan\_no, branch\_name, amount) VALUES

(1001, 2001, 'Pimpri', 15000),

(1002, 2002, 'Akurdi', 5000),

(1003, 2003, 'Hinjewadi', 22000),

(1004, 2004, 'Baner', 7000),

(1005, 2005, 'Kothrud', 8000),

(1006, 2006, 'Pimpri', 30000),

(1007, 2007, 'Akurdi', 10000),

(1008, 2008, 'Baner', 6000),

(1009, 2009, 'Kothrud', 15000),

(1010, 2010, 'Hinjewadi', 25000);

INSERT INTO Borrower (cust\_name, loan\_no) VALUES

('Alice', 2001),

('Bob', 2002),

('Charlie', 2003),

('David', 2004),

('Eva', 2005),

('Frank', 2006),

('Grace', 2007),

('Hannah', 2008),

('Isaac', 2009),

('Jack', 2010);

SELECT distinct branch\_name FROM Loan;

SELECT loan\_no

FROM Loan

WHERE branch\_name = 'Pimpri' AND amount > 12000;

SELECT Borrower.cust\_name, Loan.loan\_no, Loan.amount

FROM Borrower

JOIN Loan ON Borrower.loan\_no = Loan.loan\_no;

SELECT cust\_name FROM Depositor

UNION

SELECT cust\_name FROM Borrower;

SELECT Depositor.cust\_name

FROM Depositor

JOIN Borrower ON Depositor.cust\_name = Borrower.cust\_name;

SELECT AVG(balance) AS avg\_balance

FROM Account

WHERE branch\_name = 'Pimpri';

SELECT branch\_name, AVG(balance) AS avg\_balance

FROM Account

GROUP BY branch\_name;

SELECT branch\_name

FROM Account

GROUP BY branch\_name

HAVING AVG(balance) > 12000;

SELECT SUM(amount) AS total\_loan\_amount FROM Loan;