Create the following tables. And Solve following queries by SQL

1. Deposit (actno,cname,bname,amount,adate)

2. Branch (bname,city)

3. Customers (cname, city)

4. Borrow (loanno, cname, bname, amount) Add primary key and foreign key wherever applicable.

Insert data into the above created tables.

a. Display names of all branches located in city Bombay.

b. Display account no. and amount of depositors.

c. Update the city of customers Anil from Pune to Mumbai

d. Find the number of depositors in the bank

e. Calculate Min,Max amount of customers.

f. Create an index on deposit table.

g. Create View on Borrow table.

ANS :=

1

CREATE TABLE Branch (

bname VARCHAR(50) PRIMARY KEY,

city VARCHAR(50)

);

CREATE TABLE Customers (

cname VARCHAR(50) PRIMARY KEY,

city VARCHAR(50)

);

CREATE TABLE Deposit (

actno INT PRIMARY KEY,

cname VARCHAR(50),

bname VARCHAR(50),

amount DECIMAL(10, 2),

adate DATE,

FOREIGN KEY (cname) REFERENCES Customers(cname),

FOREIGN KEY (bname) REFERENCES Branch(bname)

);

CREATE TABLE Borrow (

loanno INT PRIMARY KEY,

cname VARCHAR(50),

bname VARCHAR(50),

amount DECIMAL(10, 2),

FOREIGN KEY (cname) REFERENCES Customers(cname),

FOREIGN KEY (bname) REFERENCES Branch(bname)

);

2

-- Insert Branch data

INSERT INTO Branch (bname, city) VALUES ('BranchA', 'Bombay');

INSERT INTO Branch (bname, city) VALUES ('BranchB', 'Delhi');

INSERT INTO Branch (bname, city) VALUES ('BranchC', 'Bombay');

-- Insert Customers data

INSERT INTO Customers (cname, city) VALUES ('Anil', 'Pune');

INSERT INTO Customers (cname, city) VALUES ('Raj', 'Mumbai');

INSERT INTO Customers (cname, city) VALUES ('Vijay', 'Bombay');

-- Insert Deposit data

INSERT INTO Deposit (actno, cname, bname, amount, adate) VALUES (1001, 'Anil', 'BranchA', 1000.00, '2022-10-01');

INSERT INTO Deposit (actno, cname, bname, amount, adate) VALUES (1002, 'Raj', 'BranchB', 5000.00, '2022-10-05');

INSERT INTO Deposit (actno, cname, bname, amount, adate) VALUES (1003, 'Vijay', 'BranchC', 3000.00, '2022-11-01');

-- Insert Borrow data

INSERT INTO Borrow (loanno, cname, bname, amount) VALUES (2001, 'Anil', 'BranchA', 15000.00);

INSERT INTO Borrow (loanno, cname, bname, amount) VALUES (2002, 'Raj', 'BranchB', 10000.00);

3

SELECT bname FROM Branch WHERE city = 'Bombay';

4

SELECT actno, amount FROM Deposit;

5

UPDATE Customers SET city = 'Mumbai' WHERE cname = 'Anil';

6

SELECT COUNT(DISTINCT cname) AS num\_depositors FROM Deposit;

7

SELECT MIN(amount) AS min\_amount, MAX(amount) AS max\_amount FROM Deposit;

8

CREATE INDEX idx\_deposit\_amount ON Deposit(amount);

9

CREATE VIEW Borrow\_View AS

SELECT loanno, cname, bname, amount FROM Borrow;