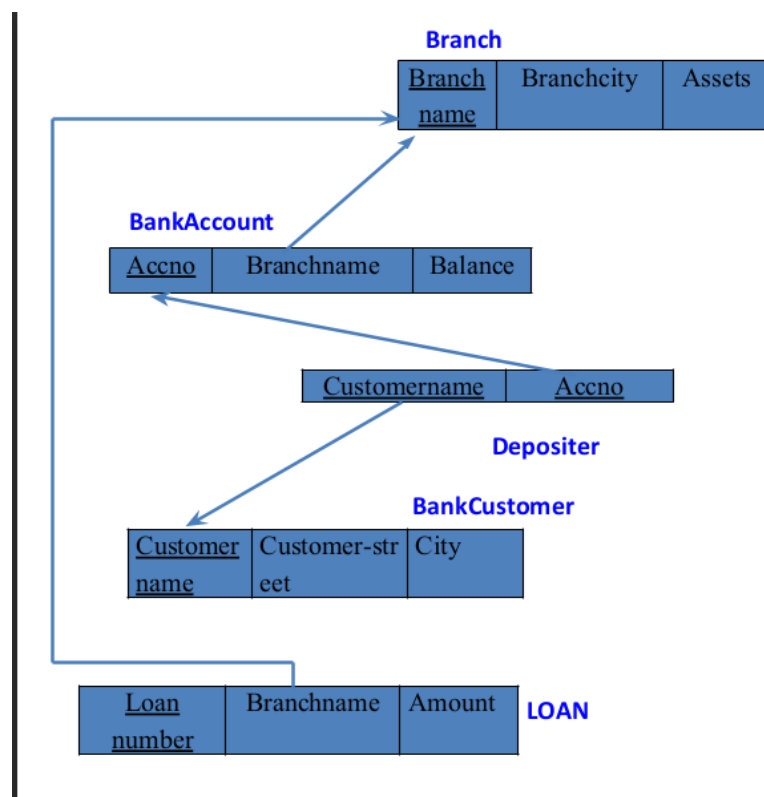Week-3 Bank Database

Branch (branch-name: String, branch-city: String, assets: real)

BankAccount(accno: int, branch-name: String, balance: real)

BankCustomer (customer-name: String, customer-street: String,

customer-city: String)

Depositer(customer-name: String, accno: int)

LOAN (loan-number: int, branch-name: String, amount: real)

Branch

Branch name	Branchcity	Assets

BankAccount

Accno	Branchname	Balance

Customername	Accno

Depositer

BankCustomer

Customer name	Customer-str eet	City

Loan number	Branchname	Amount

LOAN

WEEK-3 To do list

Create the above tables by properly specifying the primary keys and the foreign keys.

Enter at least five tuples for each relation.

Display the branch name and assets from all branches in lakhs of rupees and rename the assets column to 'assets in lakhs'.

Find all the customers who have at least two accounts at the same branch (ex. SBI_ResidencyRoad).

CREAT A VIEW WHICH GIVES EACH BRANCH THE SUM OF THE AMOUNT OF ALL THE LOANS AT THE BRANCH.

create table Branch (

BRANCHNAME varchar(50) primary key,

BRANCHCITY VARCHAR(20) ,

ASSETS real

);

desc Branch;

	Field	Type	Null	Key	Default	Extra
▶	BRANCHNAME	varchar(50)	NO	PRI	NULL	
	BRANCHCITY	varchar(20)	YES		NULL	
	ASSETS	double	YES		NULL	

create table Loan (

LOANNUMBER INT PRIMARY key,

BRANCHNAME VARCHAR(50),

AMOUNT real,

foreign key(BRANCHNAME) references Branch(BRANCHNAME));

DESC Loan;

	Field	Type	Null	Key	Default	Extra
▶	LOANNUMBER	int	NO	PRI	NULL	
	BRANCHNAME	varchar(50)	YES	MUL	NULL	
	AMOUNT	double	YES		NULL	

CREATE TABLE BankAccount (

ACCNO INT PRIMARY KEY,

BRANCHNAME VARCHAR(50),

BALANCE real,

foreign key(BRANCHNAME) references Branch(BRANCHNAME));

DESC BankAccount;

Field	Type	Null	Key	Default	Extra
ACCNO	int	NO	PRI	NULL	
BRANCHNAME	varchar(50)	YES	MUL	NULL	
BALANCE	double	YES		NULL	

CREATE TABLE BankCustomer(

CUSTOMERNAME VARCHAR(50) PRIMARY KEY,

CUSTOMERSTREET VARCHAR(50) ,

CUSTOMERCITY VARCHAR(50));

DESC BankCustomer;

Field	Type	Null	Key	Default	Extra
CUSTOMERNAME	varchar(50)	NO	PRI	NULL	
CUSTOMERSTREET	varchar(50)	YES		NULL	
CUSTOMERCITY	varchar(50)	YES		NULL	

CREATE TABLE Depositer(

CUSTOMERNAME VARCHAR(50),

ACCNO INT,

foreign key(CUSTOMERNAME) references BankCustomer(CUSTOMERNAME),

foreign key(ACCNO) references BankAccount(ACCNO));

DESC Depositer;

Field	Type	Null	Key	Default	Extra
CUSTOMERNAME	varchar(50)	YES	MUL	NULL	
ACCNO	int	YES	MUL	NULL	

INSERT INTO Branch VALUES

('SBI_Chamrajpet','Bangalore',50000),

('SBI_ResidencyRoad','Bangalore',10000),

('SBI_ShivajiRoad','bombay',20000),

('SBI_ParliamentRoad','Delhi',10000),

('SBI_Jantarmantar','Delhi',20000);

select * from Branch;

BRANCHNAME	BRANCHCITY	ASSETS
SBI_Chamrajpet	Bangalore	50000
SBI_Jantarmantar	Delhi	20000
SBI_ParliamentRoad	Delhi	10000
SBI_ResidencyRoad	Bangalore	10000
SBI_ShivajiRoad	bombay	20000
NULL	NULL	NULL

insert into Loan values

(1,'SBI_Chamrajpet',1000),

(2,'SBI_ResidencyRoad',2000),

(3,'SBI_ShivajiRoad',3000),

(4,'SBI_ParliamentRoad',4000),

(5,'SBI_Jantarmantar',5000);

select * from Loan;

LOANNUMBER	BRANCHNAME	AMOUNT
1	SBI_Chamrajpet	1000
2	SBI_ResidencyRoad	2000
3	SBI_ShivajiRoad	3000
4	SBI_ParliamentRoad	4000
5	SBI_Jantarmantar	5000
NULL	NULL	NULL

insert into BankAccount values

(1,'SBI_Chamrajpet',2000),

(2,'SBI_ResidencyRoad',5000),

(3,'SBI_ShivajiRoad',6000),

(4,'SBI_ParliamentRoad',9000),

(5,'SBI_Jantarmantar',8000),

(6,'SBI_ShivajiRoad',4000),

(8,'SBI_ResidencyRoad',4000),

(9,'SBI_ParliamentRoad',3000),

(10,'SBI_ResidencyRoad',5000),

(11,'SBI_Jantarmantar',2000);

select * from BankAccount;

	ACCNO	BRANCHNAME	BALANCE
▶	1	SBI_Chamrajpet	2000
	2	SBI_ResidencyRoad	5000
	3	SBI_ShivajiRoad	6000
	4	SBI_ParliamentRoad	9000
	5	SBI_Jantarmantar	8000
	6	SBI_ShivajiRoad	4000
	7	SBI_ResidencyRoad	5000
	8	SBI_ResidencyRoad	4000
	9	SBI_ParliamentRoad	3000
	10	SBI_ResidencyRoad	5000
	11	SBI_Jantarmantar	2000
	NULL	NULL	NULL

insert into Bankcustomer values

('Avinash','Bull_Temple_Road','Bangalore'),

('Dinesh','Bannergatta_Road','Bangalore'),

('Mohan','NationalCollage_Road','Bangalore'),

('Nikki','Akbar_Road','Delhi'),

('Ravi','Prithviraj_Road','Delhi');

select * from bankcustomer;

	CUSTOMERNAME	CUSTOMERSTREET	CUSTOMERCITY
▶	Avinash	Bull_Temple_Road	Bangalore
	Dinesh	Bannergatta_Road	Bangalore
	Mohan	NationalCollage_Road	Bangalore
	Nikki	Akbar_Road	Delhi
	Ravi	Prithviraj_Road	Delhi
*	NULL	NULL	NULL

insert into depositer values

('Avinash',1),

('Dinesh',2),

('Nikki',4),

('Ravi',5),

('Avinash',8),

('Nikki',9),

('Dinesh',10),

('Nikki',11);

select * from DEPOSITER;

	CUSTOMERNAME	CUSTOMERSTREET	CUSTOMERCITY
▶	Avinash	Bull_Temple_Road	Bangalore
	Dinesh	Bannergatta_Road	Bangalore
	Mohan	NationalCollage_Road	Bangalore
	Nikki	Akbar_Road	Delhi
	Ravi	Prithviraj_Road	Delhi
*	NULL	NULL	NULL

SELECT BRANCHNAME, ASSETS/100000 AS 'ASSETS IN LAKH' FROM BRANCH;

	BRANCHNAME	ASSETS IN LAKH
▶	SBI_Chamrajpet	0.5
	SBI_Jantarmantar	0.2
	SBI_ParliamentRoad	0.1
	SBI_ResidencyRoad	0.1
	SBI_ShivajiRoad	0.2

SELECT D.CUSTOMERNAME, B.BRANCHNAME FROM DEPOSITER D,

BANKACCOUNT B WHERE D.ACCNO=B.ACCNO GROUP BY D.CUSTOMERNAME, B.BRANCHNAME

having count(B.BRANCHNAME)>=2;

	CUSTOMERNAME	BRANCHNAME
▶	Dinesh	SBI_ResidencyRoad
	Nikki	SBI_ParliamentRoad

CREATE VIEW SUM_AMOUNT

AS SELECT BRANCHNAME, SUM(AMOUNT) AS TOTAL_AMOUNT

FROM LOAN

GROUP BY BRANCHNAME;

SELECT * FROM SUM_AMOUNT;

BRANCHNAME	TOTAL_AMOUNT
SBI_Chamrajpet	1000
SBI_Jantarmantar	5000
SBI_ParliamentRoad	4000
SBI_ResidencyRoad	2000
SBI_ShivajiRoad	3000