

WEEK-3 bank database

- 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).
- CREATE A VIEW WHICH GIVES EACH BRANCH THE SUM OF THE AMOUNT OF ALL THE LOANS AT THE BRANCH.

QUERIES- TO DO:

- 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).
- Create a view which gives each branch the sum of the amount of all the loans at the branch.



SPOT QUERY:

- UPDATE OR ADD RUPEES 1000 TO ACCOUNT BALANCE FOR THE CUSTOMERS WHO ARE RESIDING IN BANGALORE.



```
1 • create database dhiksha_bank;
2 • use dhiksha_bank;
3 • create table dhiksha_bank.branch(
4     Branch_name varchar(30),
5     Branch_city varchar(25),
6     assets int,
7     PRIMARY KEY (Branch_name)
8 );
9 • create table dhiksha_bank.BankAccount(
10     Accno int,
11     Branch_name varchar(30),
12     Balance int,
13     PRIMARY KEY(Accno),
14     foreign key (Branch_name) references branch(Branch_name)
15 );
16 • create table dhiksha_bank.BankCustomer(
17     Customername varchar(20),
18     Customer_street varchar(30),
19     CustomerCity varchar (35),
20     PRIMARY KEY(Customername)
21 );
22 • create table dhiksha_bank.Depositer(
23     Customername varchar(20),
24     Accno int,
25     PRIMARY KEY(Customername,Accno),
26
27     foreign key (Accno) references BankAccount(Accno),
28     foreign key (Customername) references BankCustomer(Customername)
29 );
30 • create table dhiksha_bank.Loan(
31     Loan_number int,
32     Branch_name varchar(30),
33     Amount int,
34     PRIMARY KEY(Loan_number),
35     foreign key (Branch_name) references branch(Branch_name)
36 );
```

```
38 • INSERT INTO Branch VALUES ('SBI_Chamrajpet', 'Bangalore', 50000);
39 • INSERT INTO Branch VALUES ('SBI_ResidencyRoad', 'Bangalore', 10000);
40 • INSERT INTO Branch VALUES ('SBI_ShivajiRoad', 'Bombay', 20000);
41 • INSERT INTO Branch VALUES ('SBI_ParlimentRoad', 'Delhi', 10000);
42 • INSERT INTO Branch VALUES ('SBI_Jantarmantar', 'Delhi', 20000);
43
44 • INSERT INTO BankAccount VALUES (1, 'SBI_Chamrajpet', 2000);
45 • INSERT INTO BankAccount VALUES (2, 'SBI_ResidencyRoad', 5000);
46 • INSERT INTO BankAccount VALUES (3, 'SBI_ShivajiRoad', 6000);
47 • INSERT INTO BankAccount VALUES (4, 'SBI_ParlimentRoad', 9000);
48 • INSERT INTO BankAccount VALUES (5, 'SBI_Jantarmantar', 8000);
49 • INSERT INTO BankAccount VALUES (6, 'SBI_ShivajiRoad', 4000);
50 • INSERT INTO BankAccount VALUES (8, 'SBI_ResidencyRoad', 4000);
51 • INSERT INTO BankAccount VALUES (9, 'SBI_ParlimentRoad', 3000);
52 • INSERT INTO BankAccount VALUES (10, 'SBI_ResidencyRoad', 5000);
53 • INSERT INTO BankAccount VALUES (11, 'SBI_Jantarmantar', 2000);
54
55 • INSERT INTO BankCustomer VALUES ('Avinash', 'Bull_Temple_Road', 'Bangalore');
56 • INSERT INTO BankCustomer VALUES ('Dinesh', 'Bannerhatta_Road', 'Bangalore');
57 • INSERT INTO BankCustomer VALUES ('Mohan', 'NationalCollege_Road', 'Bangalore');
58 • INSERT INTO BankCustomer VALUES ('Nikil', 'Akbar_Road', 'Delhi');
59 • INSERT INTO BankCustomer VALUES ('Ravi', 'Prithviraj_Road', 'Delhi');
60
61 • INSERT INTO Depositer VALUES ('Avinash', 1);
62 • INSERT INTO Depositer VALUES ('Dinesh', 2);
63 • INSERT INTO Depositer VALUES ('Nikil', 4);
64 • INSERT INTO Depositer VALUES ('Ravi', 5);
65 • INSERT INTO Depositer VALUES ('Avinash', 8);
66 • INSERT INTO Depositer VALUES ('Nikil', 9);
67 • INSERT INTO Depositer VALUES ('Dinesh', 10);
68 • INSERT INTO Depositer VALUES ('Nikil', 11);
69
70 • INSERT INTO Loan VALUES (1, 'SBI_Chamrajpet', 1000);
71 • INSERT INTO Loan VALUES (2, 'SBI_ResidencyRoad', 2000);
72 • INSERT INTO Loan VALUES (3, 'SBI_ShivajiRoad', 3000);
73 • INSERT INTO Loan VALUES (4, 'SBI_ParlimentRoad', 4000);
74 • INSERT INTO Loan VALUES (5, 'SBI_Jantarmantar', 5000);
```



76 • `select * from branch;`

Result Grid   Filter Rows: <input type="text"/>			
	Branch_name	Branch_city	assets
▶	SBI_Chamrajpet	Bangalore	50000
	SBI_Jantarmantar	Delhi	20000
	SBI_ParliamentRoad	Delhi	10000
	SBI_ResidencyRoad	Bangalore	10000
	SBI_ShivajiRoad	Bombay	20000
*	NULL	NULL	NULL



78 • `select * from BankAccount;`

Result Grid   Filter Rows: <input type="text"/>			
	Accno	Branch_name	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

80 • `select * from BankCustomer;`

Result Grid   Filter Rows: <input type="text"/> Edit:			
	Customername	Customer_street	CustomerCity
	Avinash	Bull_Temple_Road	Bangalore
	Dinesh	Bannergatta_Road	Bangalore
	Mohan	NationalCollege_Road	Bangalore
	Nikil	Akbar_Road	Delhi
	Ravi	Prithviraj_Road	Delhi
*	NULL	NULL	NULL

82 • `select * from Depositer;`

Result Grid   Filter Rows: <input type="text"/>	
	Customername
▶	Avinash
	Dinesh
	Nikil
	Ravi
	Avinash
	Nikil
	Dinesh
	Nikil
*	NULL

84 • `select * from Loan;`

Result Grid | Filter Rows:

Loan_number	Branch_name	Amount
1	SBI_Chamrajpet	1000
2	SBI_ResidencyRoad	2000
3	SBI_ShivajiRoad	3000
4	SBI_ParliamentRoad	4000
5	SBI_Jantarmantar	5000
NULL	NULL	NULL

86 • `select Branch_name, CONCAT(assets/100000,'lakhs')assets_in_lakhs from branch;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Branch_name	assets_in_lakhs
SBI_Chamrajpet	0.5000lakhs
SBI_Jantarmantar	0.2000lakhs
SBI_ParliamentRoad	0.1000lakhs
SBI_ResidencyRoad	0.1000lakhs
SBI_ShivajiRoad	0.2000lakhs

88 • `select d.Customername from Depositer d, BankAccount b`
89 `where b.Branch_name='SBI_ResidencyRoad' and`
90 `d.Accno=b.Accno group by d.Customername having count(d.Accno)>=2;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Customername
Dinesh

92 • `create view sum_of_loan`
93 `as select Branch_name, SUM(Balance)`
94 `from BankAccount`
95 `group by Branch_name;`
96 • `select * from sum_of_loan;`
97



Result Grid | Filter Rows: | Export:

Branch_name	SUM(Balance)
SBI_Chamrajpet	2000
SBI_Jantarmantar	10000
SBI_ParliamentRoad	12000
SBI_ResidencyRoad	14000
SBI_ShivajiRoad	10000

```

98 • select bc.Customername, CONCAT(Balance+1000,' rupees')
99   UPDATED_BALANCE from BankAccount b, BankCustomer bc, Depositer d
100  where bc.Customername=d.Customername and b.Accno=d.Accno and
101  bc.Customercity='Bangalore';

```

<		
Result Grid		
Filter Rows: <input type="text"/>		
Export:  Wrap Cell Content: 		
	Customername	UPDATED_BALANCE
▶	Avinash	3000 rupees
	Avinash	5000 rupees
	Dinesh	6000 rupees
	Dinesh	6000 rupees