PROGRAM 3: BANK DATABASE (06/10)

Query 1: creating tables

```
create database dhiksha_bank;
use dhiksha_bank;
create table dhiksha_bank.branch(
Branch_name varchar(30),
Branch_city varchar(25),
assets int,
PRIMARY KEY (Branch_name)
);
create table dhiksha_bank.BankAccount(
Accno int,
Branch_name varchar(30),
Balance int,
PRIMARY KEY(Accno),
foreign key (Branch_name) references branch(Branch_name)
);
create table dhiksha_bank.BankCustomer(
Customername varchar(20),
Customer_street varchar(30),
CustomerCity varchar (35),
PRIMARY KEY(Customername)
);

create table dhiksha_bank.Deposiiter(
Customername varchar(20),
Accno int,
PRIMARY KEY(Customername,Accno),

foreign key (Accno) references BankAccount(Accno),
foreign key (Customername) references BankCustomer(Customername)
);
create table dhiksha_bank.Loan(
Loan_number int,
Branch_name varchar(30),
Amount int,
PRIMARY KEY(Loan_number),
foreign key (Branch_name) references branch(Branch_name)
);
```

Query 2: inserting values into the tables

```
38 •  INSERT INTO Branch VALUES ('SBI_Chamrajpet', 'Bangalore', 50000)
39 •  ('SBI_ResidencyRoad', 'Bangalore', 10000)
40 •  ('SBI_ShivajiRoad', 'Bombay', 20000)
41 •  ('SBI_ParlimentRoad', 'Delhi', 10000)
42 •  ('SBI_Jantarmantar', 'Delhi', 20000);
43 •  select * from branch;
```

Result Grid | Filter Rows:

Branch_name	Branch_city	assets
SBI_Chamrajpet	Bangalore	50000
SBI_Jantarmantar	Delhi	20000
SBI_ParlimentRoad	Delhi	10000
SBI_ResidencyRoad	Bangalore	10000
SBI_ShivajiRoad	Bombay	20000
NULL	NULL	NULL

```
44 •  INSERT INTO BankAccount VALUES (1, 'SBI_Chamrajpet', 2000)
45 •  (2, 'SBI_ResidencyRoad', 5000)
46 •  (3, 'SBI_ShivajiRoad', 6000)
47 •  (4, 'SBI_ParlimentRoad', 9000)
48 •  (5, 'SBI_Jantarmantar', 8000)
49 •  (6, 'SBI_ShivajiRoad', 4000)
50 •  (8, 'SBI_ResidencyRoad', 4000)
51 •  (9, 'SBI_ParlimentRoad', 3000)
52 •  (10, 'SBI_ResidencyRoad', 5000
53 •  (11, 'SBI_Jantarmantar', 2000);
54 •  select * from BankAccount;
```

Result Grid | Filter Rows:

Accno	Branch_name	Balance
1	SBI_Chamrajpet	2000
2	SBI_ResidencyRoad	5000
3	SBI_ShivajiRoad	6000
4	SBI_ParlimentRoad	9000
5	SBI_Jantarmantar	8000
6	SBI_ShivajiRoad	4000

```
55 •  INSERT INTO BankCustomer VALUES ('Avinash', 'Bull_Temple_Road', 'Bangalore')
56 •  ('Dinesh', 'Bannergatta_Road', 'Bangalore')
57 •  ('Mohan', 'NationalCollege_Road', 'Bangalore')
58 •  ('Nikil', 'Akbar_Road', 'Delhi')
59 •  ('Ravi', 'Prithviraj_Road', 'Delhi');
60 •  select * from BankCustomer;
```

Result Grid | Filter Rows: | 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

```
61 •  INSERT INTO Depositer VALUES ('Avinash', 1)
62 •  ('Dinesh', 2)
63 •  ('Nikil', 4)
64 •  ('Ravi', 5)
65 •  ('Avinash', 8)
66 •  ('Nikil', 9)
67 •  ('Dinesh', 10)
68 •  ('Nikil', 11);
69 •  select * from Depositer;
```

Result Grid | Filter Rows:

Customername	Accno
Avinash	1
Dinesh	2
Nikil	4
Ravi	5
Avinash	8
Nikil	9
Dinesh	10
Nikil	11
NULL	NULL

```
70 •  INSERT INTO Loan VALUES (1, 'SBI_Chamrajpet', 1000)
71 •  (2, 'SBI_ResidencyRoad', 2000)
72 •  (3, 'SBI_ShivajiRoad', 3000)
73 •  (4, 'SBI_ParlimentRoad', 4000)
74 •  (5, 'SBI_Jantarmantar', 5000);

76 •  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_ParlimentRoad	4000
5	SBI_Jantarmantar	5000
NULL	NULL	NULL

Query 3: Display the branch name and assets from all branches in lakhs of rupees and rename the assets column to 'assets in lakhs'.

```
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_ParlimentRoad	0.1000lakhs
SBI_ResidencyRoad	0.1000lakhs
SBI_ShivajiRoad	0.2000lakhs

Query 4: Find all the customers who have at least two accounts at the same branch (eg. SBI_ResidencyRoad).

```
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

Query 5: Create a view which gives each branch the sum of the amount of all the loans at the branch.

```
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: | Expo

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