

WEEK 3

CODE

```
create database bank_database;
```

```
use bank_database;
```

```
create table branch(  
branch_name varchar(40) primary key,  
branch_city varchar(40),  
assets int  
);
```

```
create table bank_account(  
acc_no int,  
branch_name varchar(40),  
balance int,  
primary key(acc_no,branch_name),  
foreign key(branch_name)references branch(branch_name)  
on delete cascade);
```

```
create table bank_customer(  
customer_name varchar(30) primary key,  
customer_city varchar(40),  
customer_street varchar(50)  
);
```

```
create table depositer(  
customer_name varchar(30),  
acc_no int,  
primary key(customer_name,acc_no),  
foreign key(acc_no) references bank_account(acc_no),
```

```
foreign key(customer_name) references bank_customer(customer_name)
on delete cascade);
```

```
create table loan(
branch_name varchar(30),
loan_number int primary key,
amount int,
foreign key(branch_name) references branch(branch_name)
on delete cascade);
```

```
insert into branch
values('HDFC_Chamrajpet','Bengaluru',50000),('HDFC_AnandRaoCircle','Bengaluru',10000),('HDFC_S
hivajiRoad','Mumbai',20000),('HDFC_ParliamentRoad','Delhi',10000),('HDFC_Jantarmantar','Delhi',20
000);
```

```
insert into bank_account
values(1,'HDFC_Chamrajpet',2000),(2,'HDFC_AnandRaoCircle',5000),(3,'HDFC_ShivajiRoad',6000),(4,'
HDFC_ParliamentRoad',9000),(5,'HDFC_Jantarmantar',8000),(6,'HDFC_ShivajiRoad',4000),(8,'HDFC_
AnandRaoCircle',4000),(9,'HDFC_ParliamentRoad',3000),(10,'HDFC_AnandRaoCircle',5000),(11,'HDF
C_Jantarmantar',2000);
```

```
insert into bank_customer
values('Avinash','Bull_Temple_Road','Bangalore'),('Dinesh','Bannerghatta_Road','Bangalore'),('Mohan'
,'NationalCollege_Road','Bangalore'),('Nikil','Akbar_Road','Delhi'),('Ravi','Prithviraj_Road','Delhi');
```

```
insert into depositer
values('Avinash',1),('Dinesh',2),('Nikil',4),('Ravi',5),('Avinash',8),('Nikil',9),('Dinesh',10),('Nikil',11);
```

```
insert into loan
values('HDFC_Chamrajpet',1,1000),('HDFC_AnandRaoCircle',2,2000),('HDFC_ShivajiRoad',3,3000),('H
DFC_ParliamentRoad',4,4000),('HDFC_Jantarmantar',5,5000);
```

QUERY 1

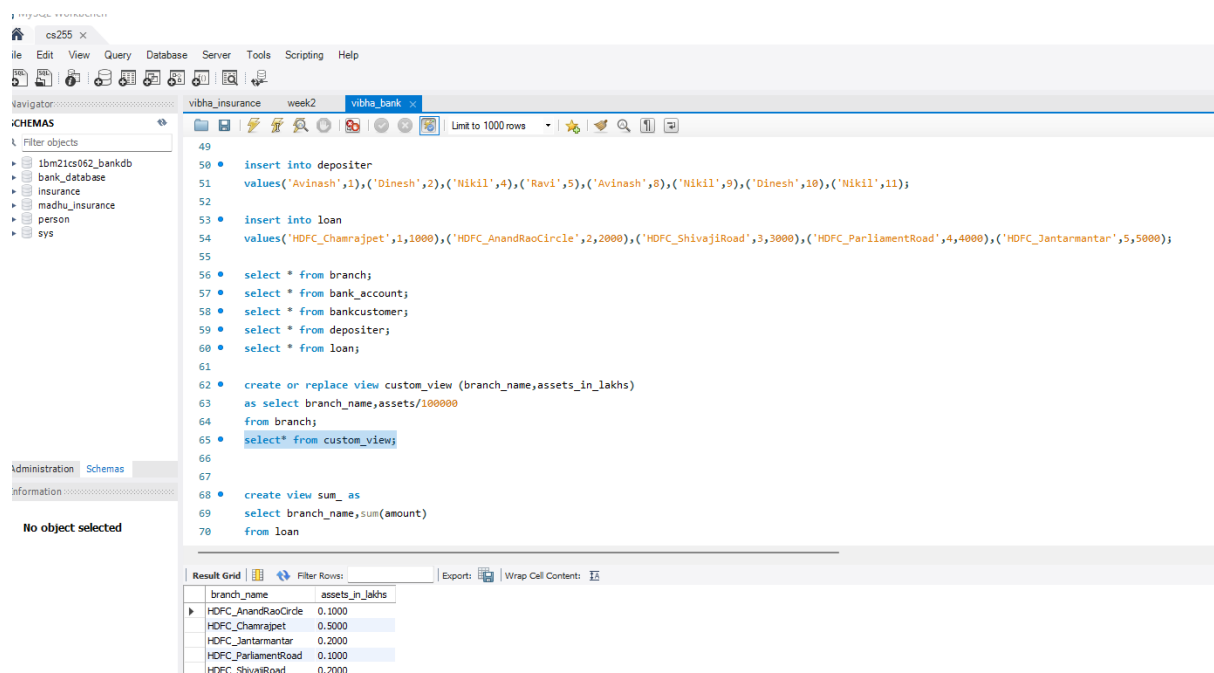
Display the branch name and assets from all branches in lakhs of rupees and rename the assets column to 'assets in lakhs'.

create or replace view custom_view (branch_name,assets_in_lakhs)

as select branch_name,assets/100000

from branch;

select* from custom_view;



The screenshot shows the SQL Developer interface with a query script in the main editor. The script includes several SQL statements: inserting data into 'depositor' and 'loan' tables, selecting data from 'branch', 'bank_account', 'bankcustomer', 'depositer', and 'loan', creating a view 'custom_view' that selects branch names and assets divided by 100,000, and creating a view 'sum_as' that calculates the sum of amounts for each branch from the 'loan' table. The 'Result Grid' at the bottom displays the output of the 'sum_as' view, showing branch names and their corresponding sum of amounts.

```
49
50 • insert into depositer
51   values('Avinash',1),('Dinesh',2),('Nikil',4),('Ravi',5),('Avinash',8),('Nikil',9),('Dinesh',10),('Nikil',11);
52
53 • insert into loan
54   values('HDFC_Chamrajpet',1,1000),('HDFC_AnandRaoCircle',2,2000),('HDFC_ShivajiRoad',3,3000),('HDFC_ParliamentRoad',4,4000),('HDFC_Jantarmantar',5,5000);
55
56 • select * from branch;
57 • select * from bank_account;
58 • select * from bankcustomer;
59 • select * from depositer;
60 • select * from loan;
61
62 • create or replace view custom_view (branch_name,assets_in_lakhs)
63   as select branch_name,assets/100000
64   from branch;
65 • select* from custom_view;
66
67
68 • create view sum_as
69   select branch_name,sum(amount)
70   from loan
```

branch_name	assets_in_lakhs
HDFC_AnandRaoCircle	0.1000
HDFC_Chamrajpet	0.5000
HDFC_Jantarmantar	0.2000
HDFC_ParliamentRoad	0.1000
HDFC_ShivajiRoad	0.2000

QUERY 3

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

insert into loan

values('HDFC_Chamrajpet',6,6000);

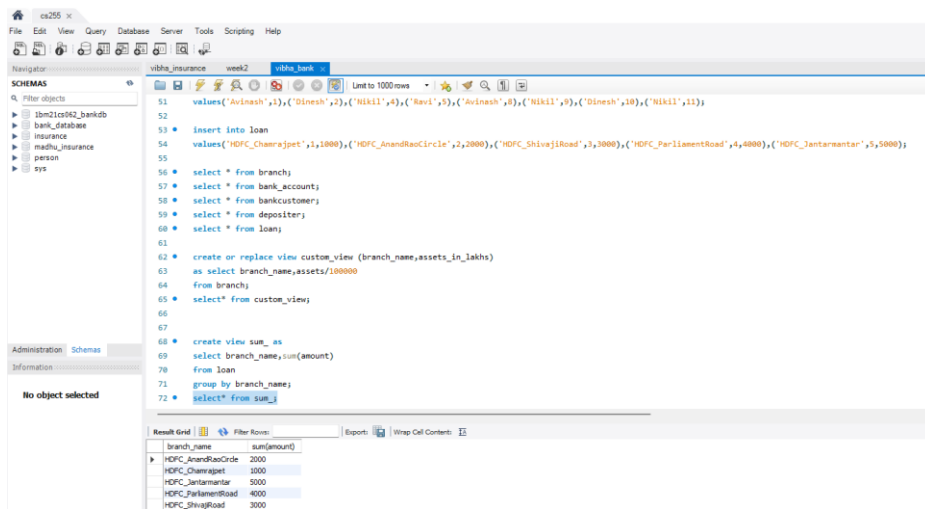
create view sum_as

select branch_name,sum(amount)

from loan

group by branch_name;

select* from sum_;



QUERY 2

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

select customer_name, branch_name from depositor d

inner join bank_account b on d.acc_no=b.acc_no

group by customer_name, branch_name

having count(*)>=2;

