IT 131

BANK DATABASE

Project

Presented by :

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- **CREATE TABLE Branchtable**

```
CREATE TABLE Branchtable (

Id INT NOT NULL PRIMARYKEY,
Name VARCHAR(120) NOT NULL,
BCode VARCHAR(15) NOT NULL,
Address VARCHAR(200) NOT NULL,
);
```

- **CREATE TABLE Employeetable**

```
CREATE TABLE Employeetable

(id int not null primary key ,
name varchar(50) not null,
branch varchar(50) not null,
joining_DATE Date,
experience varchar(50),
qualification varchar(50),
) ;
```

- **CREATE TABLE Accounttable**

```
CREATE TABLE Accounttable(
Account_Number VARCHAR(15) NOT NULL PRIMARY KEY,
Balance double NOT NULL,
Account_Type VARCHAR(15) NOT NULL,
BCode VARCHAR(15) NOT NULL,
 Gender VARCHAR(10) NOT NULL,
 DOB Date,
 Address VARCHAR(50) NOT NULL,
Aadhar VARCHAR(12) NOT NULL,
) ;
```

- **CREATE TABLE Loantable**

```
CREATE TABLE Loantable(
Loan_No  Varchar(15) NOT NULL PRIMARY KEY ,
payment_mode Varchar(15),
loan_Date Date ,
Amount double);
```

- **CREATE TABLE Customertable**

```
CREATE TABLE Customertable(
customer_id int PRIMARY KEY,
Customer_name  Varchar(15) NOT NULL,
customer_address  Varchar(15)
);
```

- **INSERT INTO TABLE branchtable**

```
INSERT INTO `branchtable` (`Id`, `Name`, `BCode`, `Address`) VALUES
(1, branch_A, 'SBI111', 'xyz111');
```

```
INSERT INTO `branchtable` (`Id`, `Name`, `BCode`, `Address`) VALUES
(2, branch_B', 'SBI222', 'xyz222');
```

```
INSERT INTO `branchtable` (`Id`, `Name`, `BCode`, `Address`) VALUES
(3, branch_C, 'SBI333', 'xyz333');
```

```
INSERT INTO `branchtable` (`Id`, `Name`, `BCode`, `Address`) VALUES
(4, branch_D', 'SBI444', 'xyz444');
```

- **INSERT INTO TABLE employeetable**

```
INSERT INTO `employeetable` (`Id`, `Name`, `Branch`) VALUES
(1, employee_A, 'SBI111');
```

```
INSERT INTO `employeetable` (`Id`, `Name`, `Branch`) VALUES
(2, employee_B, 'SBI222');
```

```
INSERT INTO `employeetable` (`Id`, `Name`, `Branch`) VALUES
(3, employee_C, 'SBI333');
```

```
INSERT INTO `employeetable` (`Id`, `Name`, `Branch`) VALUES
(4, employee_D, 'SBI444');
```

- **INSERT INTO TABLE accountable**

```
INSERT INTO `accounttable` (`Id`, `Account_Number`, `Account_Type`,
`BCode`, `Name`, `Gender`, `DOB`, `Address`, `Aadhar`, `Balance`) VALUES
(1, 'SBI23432310001', 'Savings', 'SBI234323', 'chandan', 'M', '2018-09-
06', 'xyz xyz', '234432234', 20500);
```

```
INSERT INTO `accounttable` (`Id`, `Account_Number`, `Account_Type`,
`BCode`, `Name`, `Gender`, `DOB`, `Address`, `Aadhar`, `Balance`) VALUES
(2, 'SBI23432310002', 'Savings', 'SBI234322', 'maic', 'M', '2018-09-08',
'xyz cvb, '234432233', 20502);
```

```
INSERT INTO `accounttable` (`Id`, `Account_Number`, `Account_Type`,
`BCode`, `Name`, `Gender`, `DOB`, `Address`, `Aadhar`, `Balance`) VALUES
(3, 'SBI23432310003', 'Savings', 'SBI234324', 'norah', 'f', '2018-09-04',
'ert xyz', '234432232', 20501);
```

```
INSERT INTO `accounttable` (`Id`, `Account_Number`, `Account_Type`,
`BCode`, `Name`, `Gender`, `DOB`, `Address`, `Aadhar`, `Balance`) VALUES
(4, 'SBI23432310004', 'Savings', 'SBI234321', 'hala', 'f', '2018-09-03',
'tyu xyz', '234432231', 20503);
```

- **CREATE view Tables**

```
Create view Accountview as
Select Id, Account_Number, Balance
From AccountTable;
```

Id	Account_Number	Name	Balance
1	SBI23432310001	chandan	20500
2	SBI23432310002	maic	20502
3	SBI23432310003	norah	20501
4	SBI23432310004	hala	20503

```
Create view Accountview2 as
Select Id, Name, Gender
From AccountTable;
```

Id	Name	Gender
1	chandan	M
2	maic	M
3	norah	F
4	hala	F

```
Create view employeeview as
Select Id, Name, Branch from employeetable;
```

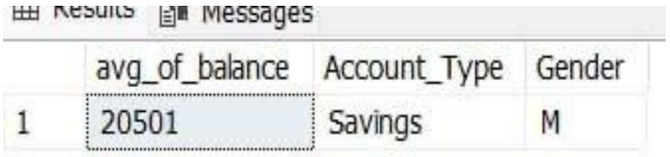
Id	Name	Branch
1	employee_A	'SBI111'
2	employee_B	'SBI222'
3	employee_C	'SBI333'
4	employee_D	'SBI444

- **select from Tables**

```
select sum (balance) as sum_of_balance,a.name
from AccountTable as a ,employeetable as e
where a.Gender='f'
groupe by a.name
having sum (balance) >20000;
```

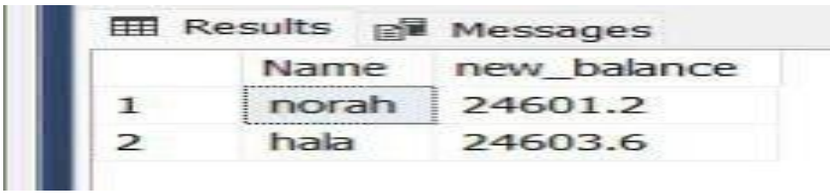
	sum_of_balance	Name
1	82012	hala
2	82004	norah

```
select avg (balance) as avg_of_balance,a.Account_type,a.Gender
from AccountTable as a ,employeetable as e
where a.Gender='m'
groupe by a.Account_type,a.Gender
having avg (balance) <=20000;
```



	avg_of_balance	Account_Type	Gender
1	20501	Savings	M

```
select name, balance*1.20 as new_balance
from  AccountTable
where a.Gender='f'
order by new_balance
```



	Name	new_balance
1	norah	24601.2
2	hala	24603.6

```
select  Account_number,account_type
From AccountTable
where Gender ='M';
```

Id	Account_Num	Accunt_type
1	SBI23432310001	savings
2	SBI23432310002	savings

```
Select *
From employeetable
WHERE name ='arun';
```

Id	name	brancg
1	arun	'SBI234233'

```
Select name,balance*1.05 as new_balance
From Accounttable
WHERE amount >500;
```

	name	new_balace
1	chandan	21525
2	maic	21527.1
3	norah	21526.05
4	hala	21528.15

```
Select name
From Employeetable
Order by name desc;
```

	name
1	phlips
2	hilomt
3	employee_D
4	arun

```
Select count(id) as number_of_account
From Accounttable
WHERE Gender =’f’ and Balance >20000;
```

	number_of_accounts
1	2

```
Select name , count(branch)
From Employeetable
Group by name;
```

	servicename	(No column name)
1	online banking	3

```
Select servicename , count(branch)
From Employeetable
Group by name;
```

	name	(No column name)
1	arun	1
2	employee_D	1
3	hilomt	1
4	phlips	1

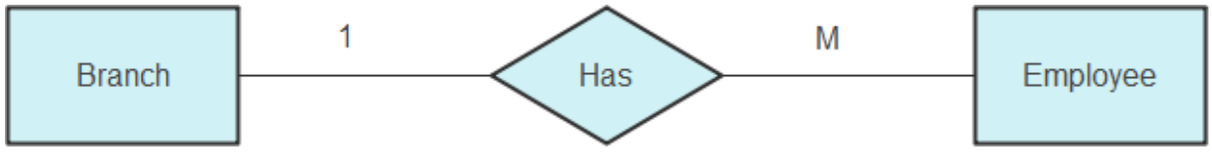
- ## Entity relational Model (ERM):

Once you have all the relationships mapped out, now draw the actual lines.

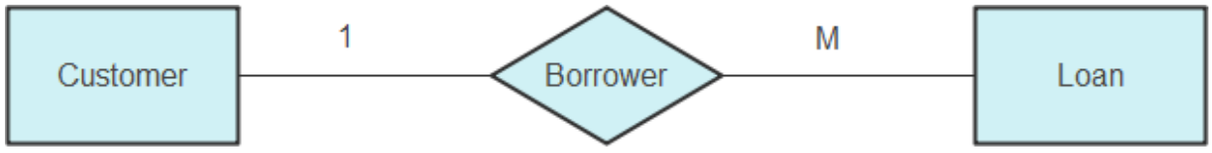
- Since a customer can have multiple accounts, and an account can be owned by one customer, then a one-to-many relationship is formed.

- Since a branch belongs to many customers and many customers belong to a branch, then the relationship is many-to-one.

- As a branch has multiple employees, similarly multiple employees work in a single branch so a one-to-many relationship exists.



- As a customer can borrow multiple loans, similarly multiple loans can be given to a single customer, so this is a one-to-many relationship.



The final diagram will look like this: