create database bank;

show databases;

use bank;

**Creating Tables :-**

create table Bank(id int primary key,Name char(20),Capitalization varchar(30));

create table Branch(ID int primary key,Address varchar(50),Bank\_id int,foreign key(Bank\_id) references Bank(ID));

create table Staff(ID int primary key,Name char(10),Surname char(10), Position char(20),Branch\_id int,foreign key(Branch\_id) references Branch(ID));

create table Salary\_Chart(ID int primary key,Position varchar(10),Salary varchar(20), Staff\_id int,foreign key(Staff\_id) references Staff(ID));

create table Client(ID int primary key,Name char(20),Branch\_id int,foreign key(Branch\_id) references Branch(ID));

create table Account(ID int primary key,Balance int,Opening\_Date date,Client\_id int,foreign key(Client\_id) references Client(ID));

create table Loans(ID int primary key,Amount int,Loan\_Date date,Account\_id int,foreign key(Account\_id) references Account(ID));

**Altering Tables :-**

1. Alter Column Name :-

alter table bank change id ID int;

1. Alter Add Column :-

alter table client add Mobile\_No varchar(12) not null after Name;

1. Alter Changing Datatype :-

alter table client modify Mobile\_No varchar(11);

1. Alter Table Name :-

alter table bank rename to banks;

1. Alter Delete Column :-

alter table staff drop surname;

**Inserting Values :**

1. BANKS -

insert into banks values(01,'KOTAK MAHINDRA BANK','990 CR');

insert into banks values(02,'STATE BANK OF INDIA','892 CR');

insert into banks values(03,'BANK OF INDIA','4100 CR');

1. BRANCH :-

insert into branch(id,address,bank\_id)

-> values (1,'Domvivli East, Maharashtra, India',1),

-> (2,'Thane East,Maharashtra, India',1),

-> (3,'Kalyan West,Maharashtra, India',2),

-> (4,'Badlapur, Maharashtra, India',2),

-> (5,'Ratnagiri, Maharashtra, India',3),

-> (6,'Karol Bagh,Delhi, India',3);

1. Staff :-

insert into staff(id,name,position,branch\_id)

-> values (101,'Akash Kharade','Manager',1),

-> (102,'Raj Bamble','Manager',3),

-> (103,'Yash Patil','Cashier',4),

-> (104,'Kushagra Chopra','Clerk',5),

-> (105,'Jayesh Tank','Loan Officer',6),

-> (106,'Pratham Patil','Cashier',2),

-> (107,'Sahil Kumar','Clerk',1),

-> (108,'Omkar Shetty','Manager',6);

4) Salary\_Chart :-

insert into salary\_chart(id,position,salary,staff\_id)

-> values(1001,'MANAGER','15,00,000/pa',101),

-> (1002,'MANAGER','15,00,000/pa',102),

-> (1003,'CASHIER','6,00,000/pa',103),

-> (1004,'CLERK','3,00,000/pa',104),

-> (1005,'LOAN OFFICER','12,00,000/pa',105),

-> (1006,'CASHIER','6,00,000/pa',106),

-> (1007,'CLERK','3,00,000/pa',107),

-> (1008,'MANAGER','15,00,000/pa',108);

5) Client :-

insert into client(id,name,surname,mobile\_no,branch\_id)

-> values(111,'Rohit','Sharma',4545454545,1),

-> (112,'Ravi','Varma',1414141414,1),

-> (113,'Virat','Kohli',1818181818,2),

-> (114,'Vinod','Gupta',2121212121,3),

-> (115,'Mahi','Dhoni',7777777777,2),

-> (116,'Yuvi','Singh',1717171717,3);

6) Account :-

insert into account(id,balance,opening\_date,client\_id)

-> values(200012083,234511,'2019-09-23',112),

-> (200012223,444511,'2012-04-13',113),

-> (400021223,1200511,'2012-08-02',114),

-> (400035600,350078,'2010-04-07',115),

-> (500078600,790034,'2022-01-04',116),

-> (800090067,980034,'2016-09-01',115),

-> (600030022,256000,'2018-12-30',116);

1. Loans :-

insert into loans(id,amount,loan\_date,Account\_id)

-> values(10010,100000,'2019-09-12',600030022),

-> (10020,450000,'2013-02-21',400035600),

-> (20040,325000,'2018-03-24',200012223),

-> (20070,985000,'2021-01-01',400021223),

-> (40030,682000,'2017-05-11',800090067);

Querys :-

1. Select Query :-

select name,surname,mobile\_no from client;

1. Select order by :-

select name,surname,mobile\_no from client order by name;

1. Order by asc :-

select balance from account order by balance;

1. Order by desc :-

select balance,opening\_date from account order by Opening\_date desc;

1. Limit:-

select surname,name,mobile\_no from client order by surname limit 3,2;

1. Order by distinct :-

select distinct position,salary from salary\_chart order by position;

1. Where :-

select name,surname from client where name like 'v%';

1. Comparison :-

select Balance from account where balance>600000;

1. Or :-

select name ,surname from client where name like 'v%' or surname like 's%';

1. Where Not :-

select \* from staff where not position='Clerk';

1. Count :-

select count(name) 'Total No Of Clients' from client;

1. Average :-

select avg(balance) 'Average Account Balance' from Account;

1. Sum :-

select Sum(balance) 'Total Amount in Banks' from account;

1. Min And max :-

select min(Amount) 'Minimun Loans Given' from Loans;

select max(Amount) 'Maximum Loans Given' from Loans;

1. Group by count :-

select position,count(\*) from staff group by position;

1. Union :-

select name from Staff union select name from client;

1. Inner Join:-

select name,surname,mobile\_no,Balance,Opening\_date from client inner join account on CID=client\_id;

1. Double Inner Joins :-

select name,surname,mobile\_no,Balance,Opening\_date,Amount,Loan\_Date from client inner join account on cid=client\_id inner join loans on aid=account\_id;

1. Creating View :-

create view Account\_Summary as select name,surname,mobile\_no,Balance,Opening\_date,Amount,Loan\_Date from client inner join account on cid=client\_id inner join loans on aid=account\_id;

1. Full join :-

select Name,address,Capitalization from banks full join branch on bkid=bank\_id;

1. Droping view:-

drop view bb;