ICIC Bank Project-SQL

Code: -

```
create database icicbank;

use icicbank;

create table Account_type(Account_no int not null primary key, Type_account varchar(20),

Manager_id int, Department_name varchar(20),Opening_date date);

insert into Account_type (Account_no, Type_Account, Manager_id, Department_name,

Opening_Date) values

(12345, 'Saving', 20, 'Account', '2003-04-23'),

(67899, 'loan', 21, 'Loan', '2004-05-24'),

(10112, 'Saving', 22, 'HR', '2006-01-04'),

(13145, 'loan', 23, 'Admin', '2003-04-23'),

(15167, 'current', 24, 'Sales', '2004-05-24'),

(18190, 'business', 25, 'Security', '2006-01-04'),

(20210, 'loan', 26, 'Account', '2003-04-23'),

(22230, 'Saving', 27, 'Loan', '2004-05-24'),

(24250, 'loan', 28, 'HR', '2006-01-04'),

(26270, 'current', 29, 'Admin', '2003-04-23'),

(28290, 'business', 30, 'Sales', '2004-05-24'),

(30310, 'current', 31, 'Security', '2006-01-04'),

(32330, 'Saving', 32, 'Account', '2003-04-23'),

(34350, 'loan', 33, 'Loan', '2004-05-24'),

(36370, 'current', 34, 'HR', '2006-01-04'),

(38390, 'current', 35, 'Admin', '2003-04-23'),

(40410, 'business', 36, 'Sales', '2004-05-24'),

(42430, 'loan', 37, 'Security', '2006-01-04'),

(44450, 'Saving', 38, 'Account', '2003-04-23'),

(46470, 'loan', 39, 'Loan', '2004-05-24'),

(48490, 'Saving', 40, 'HR', '2006-01-04');
```

create table Department(Department_id int not null primary key, Department_name

varchar(20),Manager_id int, Employee_id int, Account_no int);

insert into Department (Department_id, Department_name, Manager_id, Employee_id,

Account_no) values

(1, 'Account', 20, 50, 12345),

(8, 'Loan', 21, 51, 67899),

(11, 'HR', 22, 52, 10112),

(16, 'Admin', 23, 53, 13145),

(19, 'Sales', 24, 54, 15167),

(21, 'Security', 25, 55, 18190);

create table Customer (Account_No int not null primary key, First_Name varchar(20), City
varchar(20),

 Branch_code int, Employee_id int, Phone_no varchar(20), ATM_No int unique,

 Exp_date date,Pin_No int unique);

 insert into Customer (Account_No, First_Name, City, Branch_code, Employee_id, Phone_no,

ATM_No, Exp_date, Pin_No) values

(12345, 'Samuel', 'Ngapur', 100, 50, '650.505.1876', 423705689, '2006-04-23', 5689),

(67899, 'Allan', 'pune', 101, 51, '650.505.2876', 423568971, '2007-05-24', 8971),

(10112, 'Irene', 'Mumbai', 102, 52, '650.505.3876', 423432253, '2008-01-04', 12253),

(13145, 'Kevin', 'delhi', 103, 53, '650.505.4876', 423295535, '2006-01-24', 15535),

(15167, 'Julia', 'Mumbai', 104, 54, '650.501.1876', 423158817, '2006-02-23', 18817),

(18190, 'Donald', 'delhi', 105, 55, '650.501.2876', 423022099, '2007-06-21', 22099),

(20210, 'Christopher', 'Ngapur', 106, 56, '650.501.3876', 422885381, '2008-02-03', 25381),

(22230, 'TJ', 'pune', 107, 57, '650.501.4876', 422748663, '2004-01-27', 28663),

(24250, 'Lisa', 'Mumbai', 108, 58, '650.507.9811', 422611945, '2005-02-20', 31945),

(26270, 'Karen', 'Ngapur', 109, 59, '650.507.9822', 422475227, '2006-06-24', 35227),

(28290, 'Valli', 'pune', 110, 60, '650.507.9833', 422338509, '2007-02-07', 38509),

(30310, 'Joshua', 'Mumbai', 111, 61, '650.507.9844', 422201791, '2008-01-13', 41791),

(32330, 'Randall', 'delhi', 112, 62, '515.123.4444', 422065073, '2003-09-17', 45073),

(34350, 'Hazel', 'Ngapur', 113, 63, '515.123.5555', 421928355, '2004-02-17', 48355),

(36370, 'Luis', 'pune', 114, 64, '603.123.6666', 421791637, '2005-08-17', 51637),

(38390, 'Trenna', 'Mumbai', 115, 65, '515.123.7777', 421654919, '2002-06-07', 54919),

(40410, 'Den', 'Ngapur', 116, 66, '515.123.8888', 421518201, '2002-06-07', 58201),

(42430, 'Michael', 'pune', 117, 67, '515.123.8080', 421381483, '2002-06-07', 61483),

(44450, 'John', 'Mumbai', 118, 68, '011.44.1346.329268', 421244765, '2002-06-07', 64765),

(46470, 'Nandita', 'delhi', 119, 69, '011.44.1346.529268', 421108047, '2008-04-21', 68047),

(48490, 'Ismael', 'Pune', 120, 70, '011.44.1346.52', 420971329, '2005-03-11', 71329);

create table Employees (Employee_id int not null primary key, First_name varchar(20), Department_id int,

Manager_id int,Job_id varchar(20), Email varchar(20), Hire_Date date, Phone_no varchar(20), Salary int);

insert into Employees (Employee_id, First_name, Department_id, Manager_id, Job_id, Email,

Hire_Date, Phone_no, Salary) values

(50, 'Samuel', 1, 20, 'ST_CLERK', 'SMCCAIN', '2007-11-23', '650.505.1876', 3800),

(51, 'Allan', 8, 21, 'ST_CLERK', 'SSEWALL', '2004-01-30', '650.505.2876', 3600),

(52, 'Irene', 11, 22, 'ST_CLERK', 'SSTILES', '2004-03-04', '650.505.3876', 2900),

(53, 'Kevin', 16, 23, 'ST_CLERK', 'STOBIAS', '2004-08-01', '650.505.4876', 2500),

(54, 'Julia', 19, 24, 'ST_CLERK', 'SVOLLMAN', '2005-03-10', '650.501.1876', 4000),

(55, 'Donald', 21, 25, 'ST_CLERK', 'TFOX', '2005-12-15', '650.501.2876', 3900),

(56, 'Christopher', 1, 26, 'ST_CLERK', 'TGATES', '2006-11-03', '650.501.3876', 3200),

(57, 'TJ', 8, 27, 'ST_MAN', 'TJOLSON', '2005-11-11', '650.501.4876', 2800),

(58, 'Lisa', 11, 28, 'ST_MAN', 'TRAJS', '2007-03-19', '650.507.9811', 3100),

(59, 'Karen', 16, 29, 'ST_MAN', 'VJONES', '2008-01-24', '650.507.9822', 3000),

(60, 'Valli', 19, 30, 'ST_MAN', 'VPATABAL', '2008-02-23', '650.507.9833', 2600),

(61, 'Joshua', 21, 31, 'ST_MAN', 'WGIETZ', '2003-05-01', '650.507.9844', 6400),

(62, 'Randall', 1, 32, 'FI_ACCOUNT', 'WSMITH', '2005-10-10', '515.123.4444', 6200),

(63, 'Hazel', 8, 33, 'FI_ACCOUNT', 'WTAYLOR', '2007-11-16', '515.123.5555', 11500),

(64, 'Luis', 11, 34, 'FI_ACCOUNT', 'JNAYER', '2005-07-16', '603.123.6666', 10000),

(65, 'Trenna', 16, 35, 'FI_ACCOUNT', 'JPATEL', '2006-09-28', '515.123.7777', 9600),

(66, 'Den', 19, 36, 'FI_ACCOUNT', 'JRUSSEL', '2007-01-14', '515.123.8888', 7400),

(67, 'Michael', 21, 37, 'SA_REP', 'JSEO', '2008-03-08', '515.123.8080', 7300),

(68, 'John', 1, 38, 'SA_REP', 'JTAYLOR', '2005-08-20', '011.44.1346.329268', 6100),

(69, 'Nandita', 8, 39, 'SA_REP', 'JWHALEN', '2005-10-30', '011.44.1346.529268', 11000),

(70, 'Ismael', 11, 40, 'SA_REP', 'KCHUNG', '2005-02-16', '011.44.1346.52', 8800);

create table Bank_details(branch_code int not null primary key, address varchar(20), department_id int, branch_name varchar(20), state varchar(20));

Insert into Bank_details (branch_code, address, department_id, branch_name, state) Values

(100, 'Ngapur', 1, 'ICIC_N', 'Maharashtra'),

(101, 'Pune', 1, 'ICIC_P', 'Maharashtra'),

(102, 'Mumbai', 1, 'ICIC_M', 'Maharashtra'),

(103, 'Delhi', 1, 'ICIC_D', 'DEL'),

(104, 'Mumbai', 1, 'ICIC_M', 'Maharashtra'),

(105, 'Delhi', 1, 'ICIC_D', 'DEL'),

(106, 'Ngapur', 1, 'ICIC_N', 'Maharashtra'),

(107, 'Pune', 8, 'ICIC_P', 'Maharashtra'),

(108, 'Mumbai', 8, 'ICIC_M', 'Maharashtra'),

(109, 'Ngapur', 8, 'ICIC_N', 'Maharashtra'),

(110, 'Pune', 11, 'ICIC_P', 'Maharashtra'),

(111, 'Mumbai', 11, 'ICIC_M', 'Maharashtra'),

(112, 'Delhi', 11, 'ICIC_D', 'DEL'),

(113, 'Ngapur', 11, 'ICIC_N', 'Maharashtra'),

(114, 'Pune', 11, 'ICIC_P', 'Maharashtra'),

(115, 'Mumbai', 16, 'ICIC_M', 'Maharashtra'),

(116, 'Ngapur', 16, 'ICIC_N', 'Maharashtra'),

(117, 'Pune', 16, 'ICIC_P', 'Maharashtra'),

(118, 'Mumbai', 19, 'ICIC_M', 'Maharashtra'),

(119, 'Delhi', 19, 'ICIC_D', 'DEL'),

(120, 'Pune', 21, 'ICIC_P', 'Maharashtra');

```sql
create table Job_details (job_id varchar(20) not null primary key, department_id int, branch_code
int);

insert into Job_details (job_id, department_id, branch_code) values

('ST_CLERK', 1, 101),

('ST_MAN', 8, 108),

('FI_ACCOUNT', 11, 113),

('SA_REP', 19, 118);


alter table Customer

add constraint foreign key (branch_code) references Bank_details(branch_code);


alter table Customer

add constraint foreign key (employee_id) references Employees(employee_id);


alter table Employees

add constraint foreign key (department_id) references department(department_id);


alter table Employees

add constraint foreign key (job_id) references job_details(job_id);


alter table Department

add constraint foreign key (employee_id) references employees(employee_id);


alter table Department

add constraint foreign key (account_no) references customer(account_no);


alter table Department

add constraint foreign key (account_no) references account_type(account_no);


alter table Bank_details

add constraint foreign key(department_id) references department(department_id);
```
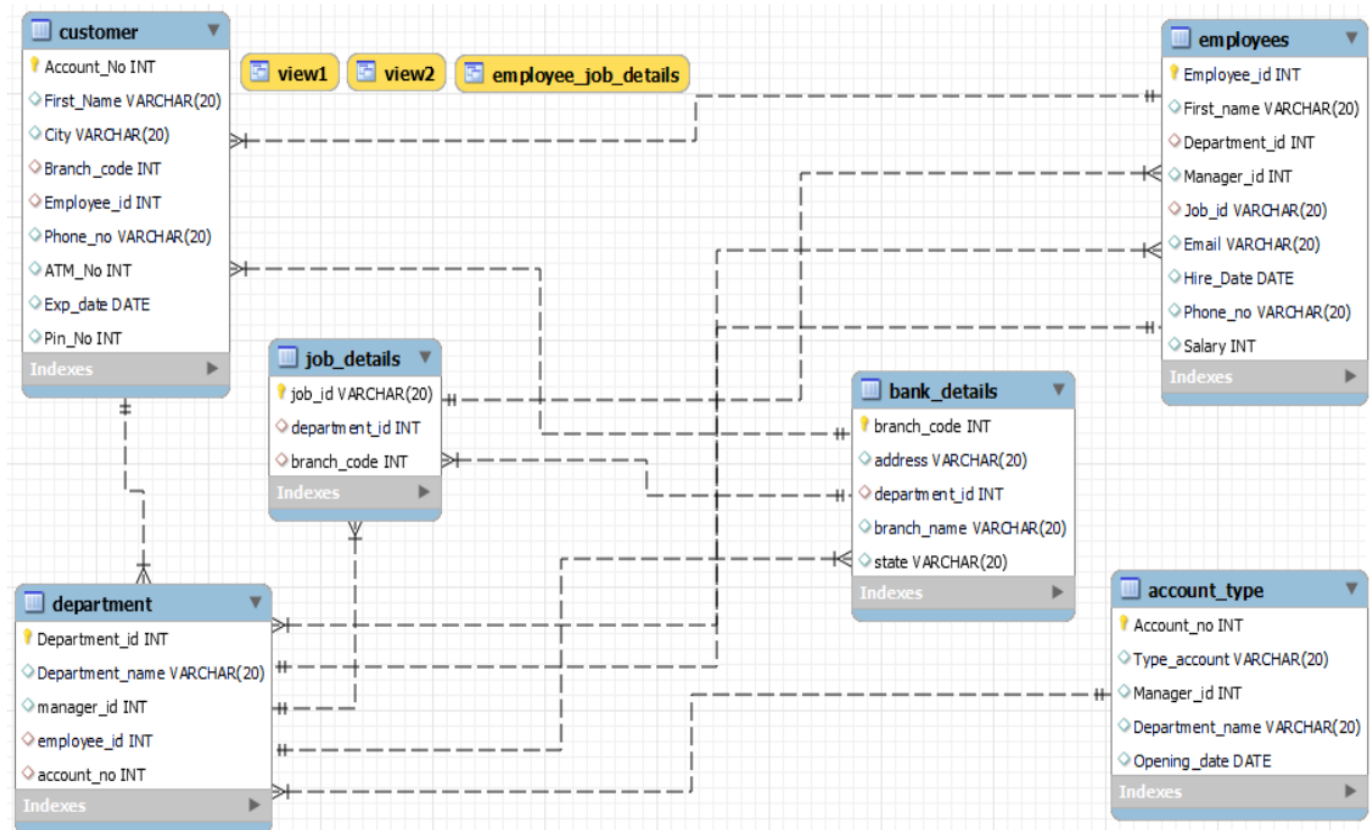
alter table Job_details

add constraint foreign key (department_id) references department(department_id);

alter table Job_details

add constraint foreign key (branch_code) references bank_details(branch_code);

ER Model: -

-- Project answers: -

-- 1) Find an employee's whose id is 52 and branch name is icicp.

Ans: select e.employee_id, e.first_name, e. department_id, e.manager_id, e.email, e.hire_date, e.phone_no, e.salary from employees e inner join bank_details b on e.department_id=b.department_id where e.employee_id=52 and b.branch_name='icic_p' group by e.employee_id;

-- 2) Write a query to fetch all the details who doesn't belong to mumbai, pune, delhi

Ans: select * from bank_details where address not in ('mumbai','pune','delhi');

-- 3) Find details department name, address, branch code, dept _id, city of the account no 18190

Ans: select d.department_name, b.address, b.branch_code, d.department_id, c.city from department d join bank_details b on d.department_id=b.department_id join customer c on b.branch_code=c.branch_code where d.account_no=18190;

-- 4) Find department id, department name, job id whose only work in Loan, HR, admin.

Ans: select d.department_id, d.department_name, j.job_id from department d join job_details j on d.department_id=j.department_id where d.department_name in('loan','hr','admin') group by d.department_id,d.department_name,j.job_id;

-- 5) Find the type_account, state account number whose atm no 422748663.

Ans: select a.type_account, a.account_no from account_type a join customer c on a.account_no=c.account_no where c.atm_no=422748663;

-- 6) Create a view with that show address, branch name, department name, first name. phone no.

Ans: create view view1 as

select b.address, b.branch_name, d.department_name, e.first_name, e.phone_no from bank_details b

join department d on b.department_id=d.department_id

join employees e on d.department_id=e.department_id

group by

b.address,b.branch_name,d.department_name,e.first_name,e.phone_no;

-- 7) Create view city, department name whose opening date is less than 24 May 04

Ans: create view view2 as

select c.city, d.department_name from customer c

join department d on c.employee_id=d.employee_id

join account_type a on d.account_no=a.account_no

where opening_date < '2004-05-04';

-- 8) Create view only job id for clerk, manager, an accountant with all detail and name it employee job_details

Ans: create view employee_job_details as

select * from employees

where job_id in ('st_clerk','st_man','fi_account') ;

-- 9) In the Customer table change the atm_no 423295535 with 42321992.

Ans: update customer set atm_no=42321992 where atm_no=423295535;

-- 10) In the Account_type table change all sales account into admin.

Ans: update account_type set department_name='admin' where department_name='sales';