bank_details

- 🔑 Branch_code INT
- ◇ Address VARCHAR(30)
- ◇ Department_id INT
- ◇ Branch_name VARCHAR(30)
- ◇ State VARCHAR(20)

Indexes ▶

customer

- 🔑 Account_no INT
- ◇ First_name VARCHAR(20)
- ◇ City VARCHAR(20)
- ◇ Branch_code INT
- ◇ Employee_id INT
- ◇ Phone_no VARCHAR(20)
- ◇ ATM_no INT
- ◇ Exp_Date DATE
- ◇ pin_no INT

Indexes ▶

employees

- 🔑 Employee_id INT
- ◇ First_name VARCHAR(30)
- ◇ Department_id INT
- ◇ Manager_id INT
- ◇ job_id VARCHAR(20)
- ◇ Email VARCHAR(20)
- ◇ Hire_Date DATE
- ◇ Phone_no VARCHAR(20)
- ◇ Salary INT

Indexes ▶

department

- 🔑 Department_id INT
- ◇ Department_name VARCHAR(20)
- ◇ Manager_id INT
- ◇ Employee_id INT
- ◇ Account_no INT

Indexes ▶

account_types

- 🔑 Account_no INT
- ◇ Type_Account VARCHAR(50)
- ◇ Manager_id INT
- ◇ Department_name VARCHAR(50)
- ◇ Opening_date DATE

Indexes ▶

job_details

- 🔑 Job_id VARCHAR(20)
- ◇ Department_id INT
- ◇ Branch_code INT

Indexes ▶

```sql
[ICIC BANK MANAGEMENT SYSTEM]

# CREATING DATABASE FOR ICIC BANK MANAGEMENT SYSTEM
 create database ICICBMSYSTEM;
 use ICICBMSYSTEM;

 # CREATING TABLE NAME AS Account_Types
 create table Account_Types
 (
Account_no int,
Type_Account varchar(50),
Manager_id int,
Department_name varchar(50),
Opening_date date,
primary key (Account_no)
);

# CREATING TABLE NAME AS Department
create table Department
(
Department_id int,
Department_name varchar(20),
Manager_id int,
Employee_id int,
Account_no int,
primary key (Department_id),
foreign key (Account_no) references Account_types(Account_no)
on delete cascade
);

# CREATING TABLE NAME AS Bank_Details
create table Bank_Details
(
Branch_code int,
Address varchar(30),
Department_id int,
Branch_name varchar(30),
State varchar(20),
primary key(Branch_code),
foreign key(Department_id) references Department(Department_id)
on delete cascade
);

# CREATING TABLE NAME AS Employees
create table Employees
(
Employee_id int,
First_name varchar(30),
Department_id int,
Manager_id int,
job_id varchar(20),
```

```sql
52    Email varchar(20),
53    Hire_Date date,
54    Phone_no varchar(20),
55    Salary int,
56    primary key (Employee_id),
57    foreign key(Department_id) references Department(department_id)
58    on delete cascade
59    );
60
61    # CREATING TABLE NAME AS Customer
62    create table Customer
63     (
64    Account_no int,
65    First_name varchar(20),
66    City varchar(20),
67    Branch_code int,
68    Employee_id int,
69    Phone_no varchar(20),
70    ATM_no int unique,
71    Exp_Date date,
72    pin_no int unique,
73    primary key(Account_no),
74    foreign key (Branch_code) references Bank_Details(Branch_code)
75    on delete cascade,
76    foreign key (Employee_id) references Employees (Employee_id)
77    on delete cascade
78    );
79
80    # CREATING TABLE NAME AS Job_Details
81    create table Job_Details
82     (
83    Job_id varchar(20),
84    Department_id int,
85    Branch_code int,
86    primary key (Job_id),
87    foreign key (Department_id) references Department (Department_id)
88    on delete cascade,
89    foreign key (Branch_code) references Bank_Details(Branch_code)
90    on delete cascade
91    );
92
93    # INSERTING VALUES IN TABLE OF Account_Types
94    insert into Account_Types(Account_no,Type_Account,Manager_id,Department_name,Opening_date)
95    values
96    (12345,'saving',20,'Account','2003-04-23'),
97    (67899,'loan',21,'Loan','2004-05-24'),
98    (10112,'saving',22,'HR','2006-01-04'),
99    (13145,'loan',23,'Admin','2003-04-23'),
100   (15167,'Current',24,'sales','2004-05-24'),
101   (18190,'Business',25,'Security','2006-01-04'),
102   (20210,'loan',26,'account','2003-04-23'),
```

```sql
103    (22230,'saving',27,'loan','2004-05-24'),
104    (24250,'loan',28,'HR','2006-01-04'),
105    (26270,'current',29,'admin','2003-04-23'),
106    (28290,'business',30,'Sales','2004-05-24'),
107    (30310,'current',31,'Security','2006-01-04'),
108    (32330,'Saving',32,'account','2003-04-23'),
109    (34350,'loan',33,'loan','2004-05-24'),
110    (36370,'current',34,'HR','2006-01-04'),
111    (38390,'current',35,'admin','2003-04-23'),
112    (40410,'business',36,'Sales','2004-05-24'),
113    (42430,'current',37,'Security','2006-01-04'),
114    (44450,'Saving',38,'account','2003-04-23'),
115    (46470,'loan',39,'loan','2004-05-24'),
116    (48490,'saving',40,'HR','2006-01-04');
117
118    # SHOWING ALL COLUMNS PRESENT IN TABLE OF Account_Types
119     select * from Account_Types;
120
121    # INSERTING VALUES IN TABLE OF Department
122    insert into Department(Department_id,Department_name,Manager_id,Employee_id,Account_no)
123    values
124    (1,'Account',20,50,12345),
125    (8,'Loan',21,51,67899),
126    (11,'HR',22,52,10112),
127    (16,'Admin',23,53,13145),
128    (19,'Sales',24,54,15167),
129    (21,'Security',25,55,18190);
130
131    # SHOWING ALL COLUMNS PRESENT IN TABLE OF Department
132    select * from Department;
133
134    # INSERTING VALUES IN TABLE OF Bank_Details
135    insert into Bank_Details(Branch_code,Address,Department_id,Branch_name,State)
136    values
137    (100,'Nagpur',1,'ICIC_N','Maharashtra'),
138    (101,'pune',1,'ICIC_P','Maharashtra'),
139    (102,'Mumbai',1,'ICIC_M','Maharashtra'),
140    (103,'Delhi',1,'ICIC_d','DEL'),
141    (104,'Mumbai',1,'ICIC_M','Maharashtra'),
142    (105,'delhi',1,'ICIC_D','DEL'),
143    (106,'Nagpur',1,'ICIC_N','Maharashtra'),
144    (107,'Pune',8,'ICIC_P','Maharashtra'),
145    (108,'Mumbai',8,'ICIC_M','Maharashtra'),
146    (109,'Nagpur',8,'ICIC_N','Maharashtra'),
147    (110,'pune',11,'ICIC_P','Maharashtra'),
148    (111,'Mumbai',11,'ICIC_M','Maharashtra'),
149    (112,'Delhi',11,'ICIC_D','DEL'),
150    (113,'Nagpur',11,'ICIC_N','Maharashtra'),
151    (114,'Pune',11,'ICIC_P','Maharashtra'),
152    (115,'Mumbai',16,'ICIC_M','Maharashtra'),
153    (116,'Nagpur',16,'ICIC_N','Maharashtra'),
```

```sql
154    (117,'Pune',16,'ICIC_P','Maharashtra'),
155    (118,'Mumbai',19,'ICIC_M','Maharashtra'),
156    (119,'Delhi',19,'ICIC_D','DEL'),
157    (120,'Pune',21,'ICIC_P','Maharashtra');
158
159    # SHOWING ALL COLUMNS PRESENT IN TABLE OF Bank_Details
160    select * from Bank_Details;
161
162    # INSERTING VALUES IN TABLE OF Employees
163    insert into Employees(Employee_id,First_name,Department_id,Manager_id,Job_id,Email,Hire_Date,Phone_no,Salary)
164    values
165    (50,'Samuel',1,20,'ST_CLERK','SMCCAIN','2007-11-23','650.505.1876',3800),
166    (51,'Allan',8,21,'ST_CLERK','SSEWALL','2004-01-30','650.505.2876',3600),
167    (52,'Irene',11,22,'ST_CLERK','SSTILES','2004-03-04','650.505.3876',2900),
168    (53,'Kevin',16,23,'ST_CLERK','STOBIAS','2004-08-01','650.505.4876',2500),
169    (54,'Julia',19,24,'ST_CLERK','SVOLLMAN','2005-03-10','650.501.1876',4000),
170    (55,'Donald',21,25,'ST_CLERK','TFOX','2005-12-15','650.501.2876',39000),
171    (56,'Christopher',1,26,'ST_CLERK','TGATES','2006-11-03','650.501.3876',3200),
172    (57,'TJ',8,27,'ST_MAN','TJOLSON','2005-11-11','650.501.4876',2800),
173    (58,'Lisa',11,28,'ST_MAN','TRAJS','2007-03-19','650.507.9811',3100),
174    (59,'Karen',16,29,'ST_MAN','VJONES','2004-01-24','650.507.9822',3000),
175    (60,'Valli',19,30,'ST_MAN','VPATABAL','2008-02-23','650.507.9833',2600),
176    (61,'Joshua',21,31,'ST_MAN','WGIETZ','2003-05-01','650.507.9844',6400),
177    (62,'Randall',1,32,'FI_ACCOUNT','WSMITH','2005-10-10','515.123.4444',6200),
178    (63,'Hazel',8,33,'FI_ACCOUNT','WTAYLOR','2007-11-16','515.123.5555',11500),
179    (64,'Luis',11,34,'FI_ACCOUNT','JNAYER','2005-07-16','603.123.6666',10000),
180    (65,'Trenna',16,35,'FI_ACCOUNT','JPATEL','2006-09-28','515.123.7777',9600),
181    (66,'Den',19,36,'FI_ACCOUNT','JRUSSEL','2007-01-14','515.123.8888',7400),
182    (67,'Michael',21,37,'SA_REP','JSEO','2008-03-08','515.123.8080',7300),
183    (68,'John',1,38,'SA_REP','JTAYLOR','2005-07-20','011.44.1346.329268',6100),
184    (69,'Nandita',8,39,'SA_REP','JWHALEN','2005-10-30','011.44.1346.529268',11000),
185    (70,'Ismael',11,40,'SA_REP','KCHUNG','2005-02-16','011.44.1346.52',8800);
186
187    # SHOWING ALL COLUMNS PRESENT IN TABLE OF Employees
188     select * from Employees;
189
190    # INSERTING VALUES IN TABLE OF Customer
191    insert into Customer(Account_No,First_Name,city,Branch_code,Employee_id,Phone_no,ATM_NO,Exp_date,Pin_No)
192    values
193    (12345,'Samuel','Ngapur',100,50 ,'650.505.1876',423705689,'2006-04-23',5689),
194    (67899,'Allan','pune',101,51,'650.505.2876',423568971,'2007-05-24',8971),
195    (10112,'Irene','Mumbai',102,52,'650.505.3876',423432253,'2008-01-04',12253),
196    (13145,'Kevin','delhi',103,53,'650.505.4876',423295535,'2006-01-24',15535),
197    (15167,'Julia','Mumbai',104,54,'650.501.1876',423158817,'2006-02-23',18817),
198    (18190,'Donald','delhi',105,55,'650.501.2876',423022099,'2007-06-21',22099),
199    (20210,'Christopher','Ngapur',106,56,'650.501.3876',422885381,'2008-02-03',25381),
200    (22230,'TJ','pune',107,57,'650.501.4876',422748663,'2004-01-27',28663),
201    (24250,'Lisa','Mumbai',108,58,'650.507.9811',422611945,'2005-02-20',31945),
202    (26270,'Karen','Ngapur',109,59,'650.507.9822',422475227,'2006-06-24',35227),
203    (28290,'Valli','pune',110,60,'650.507.9833',422338509,'2007-02-07',38509),
204    (30310,'Joshua','Mumbai',111,61,'650.507.9844',422201791,'2008-01-13',41791),
```

```sql
205    (32330,'Randall','delhi',112,62,'515.123.4444',422065073,'2003-09-17',45073),
206    (36370,'Luis','pune',114,64,'603.123.6666',421791637,'2005-08-17',51637),
207    (38390,'Trenna','Mumbai',115,65,'515.123.7777',421654919,'2002-06-07',54919),
208    (40410,'Den','Ngapur',116,66,'515.123.8888',421518201,'2002-06-07',58201),
209    (42430,'Michael','pune',117,67,'515.123.8080',421381483,'2002-06-07',61483),
210    (44450,'John','Mumbai',118,68,'011.44.1346.329268',421244765,'2002-06-07',64765),
211    (46470,'Nandita','delhi',119,69,'011.44.1346.529268',421108047,'2008-04-21',68047),
212    (48490,'Ismael','Pune',120,70,'011.44.1346.52',420971329,'2005-03-11',71329);
213
214    # SHOWING ALL COLUMNS PRESENT IN TABLE OF Customer
215     select * from Customer;
216
217    # INSERTING VALUES IN TABLE OF Job_Details
218    insert into Job_Details(Job_id,Department_id,Branch_code)
219    values
220    ('ST_CLERK',1,101),
221    ('ST_MAN',8,108),
222    ('FI_ACCOUNT',11,113),
223    ('SA_REP',19,118);
224
225    # SHOWING ALL COLUMNS PRESENT IN TABLE OF Job_Details
226    select * from Job_Details;
227
228    [QUERIES WITH SOLUTION]
229
230    # query 1: Find an employee's whose id is 52 and branch name is icicp (ICIC_P).
231    SELECT * FROM employees, bank_details
232    WHERE employee_id = 52 AND branch_name = 'ICIC_P';
233
234    # query 2: Count the number of employees working in the loan department and show its opening dates and address.
235    SELECT count(*) AS 'number of Employees', opening_date, address, department_name
236    FROM account_types, bank_details
237    WHERE department_name = 'loan'
238    GROUP BY opening_date, address;
239
240    # query 3: Find details department name, address, branch code, dept _id, city of the account no 18190.
241    SELECT account_types.department_name, bank_details.address, bank_details.branch_code, bank_details.department_id, customer.city
242    FROM bank_details,account_types,customer
243    JOIN department ON department.department_id = bank_details.department_id
244    WHERE account_no = 18190;
245
246    # query 4: Find department id, department name, job id whose only work in Loan, HR, admin.
247    SELECT department.department_id, department.department_name, job_details.job_id
248    FROM department, job_details
249    WHERE department_name IN ('Loan', 'HR', 'Admin');
250
251    # query 5: Find the type_account, state account number whose atm no 422748663.
252    SELECT account_types.type_account, bank_details.state, customer.account_no, atm_no
253    FROM bank_details, customer, account_types
254    WHERE atm_no LIKE '422748663';
255
```

```sql
256    # query 6: Create a view with that show address, branch name, department name, first name. phone no.
257    CREATE VIEW organisationview AS
258    SELECT bank_details.address, bank_details.branch_name, department.department_name, employees.first_name, employees.phone_no
259    FROM bank_details,employees,department;
260
261    /*VIEWING ALL DETAILS PRESENT IN TABLE OF organisationview*/
262    SELECT * FROM organisationview;
263
264    # query 7: Create view city, department name whose opening date is less than 24 May 04 (2004-06-24).
265    CREATE VIEW organisation1view AS
266    SELECT customer.city, department.department_name, account_types.opening_date
267    FROM customer,department,account_types
268    WHERE opening_date < '2004-06-24';
269
270    /*VIEWING ALL DETAILS PRESENT IN TABLE OF organisation1view*/
271    SELECT * FROM organisation1view;
272
273    # query 8: Create view only job id for clerk, manager, an accountant with all detail and name it employee job_deatils.
274    CREATE VIEW organisation3view AS
275    SELECT employee_id,first_name,manager_id,department_id,job_id,email,hire_date,phone_no,salary
276    FROM employees
277    WHERE job_id IN ('ST_CLERK', 'ST_MAN', 'FI_ACCOUNT');
278
279    /*VIEWING ALL DETAILS PRESENT IN TABLE OF organisation3view*/
280    SELECT * FROM organisation3view;
281
282    # query 9: In the job details change the atm pin 423295535 with 42321992.
283    UPDATE customer
284    SET atm_no = '42321992'
285    WHERE atm_no = '423295535';
286
287    # query 10: In the job, details change all sales,account into admin and account type into saving.
288    UPDATE account_types
289    SET department_name = 'admin', type_account = 'saving'
290    WHERE department_name = 'sales' AND department_name = 'account';
291
292    [THE END]
```