

Database: Banking Transaction Information System

Name	Attribute	Primary Key
Customer	cid,cname,loc,gender,dob	cid
Bank_Brn	Bcode,bloc,bstate	Bcode
Deposit	Dacno,dtype,ddate,dmdate,damt,dmamt	Dacno
Loan	Lacno,ltype,ldate,lamt	lacno

Customer:

<u>Attribute</u>	<u>Data type</u>
cid	number
cname	Varchar
Loc	varchar
Gender	Char
dob	date

<u>cid</u>	<u>Cname</u>	<u>Loc</u>	<u>Gender</u>	<u>Dob</u>
100	Pranab	Delhi	M	16-jan-1970
200	Rakhi	Mumbai	F	20-feb-1978
300	Pranab	Kolkata	M	20-mar-1980
400	Sanchita	Mumbai	F	02-apr-1982
500	Supriya	Chennai	M	11-mar-1976
600	Rekha	Delhi	F	05-jun-1979
700	Aastik	Kolkata	M	29-aug-1975
800	Anumita	Mumbai	F	15-sep-1988
900	rodrigs	Delhi	M	16-oct-1977
950	sanchit	chennai	M	02-apr-1986

Bank Brn:

<u>Attribute</u>	<u>Data Type</u>
Bcode	Number

Bloc	Varchar
bstate	varchar

Bank brn

bcode	bloc	bstate
110	Delhi	Delhi
120	Delhi	Delhi
210	Mumbai	Maharashtra
310	Chennai	Tamil Nadu
410	Kolkata	West Bengal
420	Kolkata	West Bengal

Deposit:

Attribute	datatype	Abbreviation
Dacno	Varchar	Deposit account number
Dtype	Varchar	Type of deposit account
Ddate	Date	Date on which deposit account is opened
Dmdate	Date	Maturity date of deposit account
Damt	Number	Deposited amount at the time of opening
dmamt	number	Maturity amount of deposit account

Deposit:

dacno	dtype	ddate	dmdate	damt	dmamt
Fd01	Fd	20-oct-2004	20-oct-2009	10000	22000
Fd02	Fd	10-mar-2005	10-mar-2007	12000	13200
Fd03	Fd	02-sep-2006	02-sep-2007	15000	15600
Fd04	Fd	01-jul-2007	01-jul-2010	20000	22400
Fd05	Fd	15-aug-2004	15-aug-2014	10000	34000
Fd06	Fd	05-jun-2004	05-jun-2009	5000	10000

Fd07	Fd	11-feb-2005	11-feb-2008	36000	39600
Fd08	Fd	07-jun-2006	07-jun-2012	50000	64400
Sb01	Sb	23-jul-2006	23-jul-2009	5000	8600
Sb02	Sb	12-mar-2003	12-mar-2008	20000	32000
Sb03	Sb	20-apr-2004	20-apr-2008	10000	14800
Sb04	Sb	01-jul-2005	01-jul-2015	6000	30000
Sb05	Sb	05-feb-2006	05-feb-2009	20000	23600
Sb06	Sb	11-may-2004	11-may-2010	10000	47200
Sb07	Sb	10-mar-2003	10-mar-2008	6000	16000
Sb08	Sb	22-apr-2004	22-apr-2010	20000	22200
Sb09	Sb	21-mar-2005	21-mar-2020	40000	41000
Sb10	Sb	23-jul-2006	23-jul-2007	10000	56000
Sb11	Sb	23-jul-2006	23-jul-2009	15000	34400
Sb12	Sb	22-apr-2004	22-apr-2010	5000	27200
Sb13	Sb	20-oct-2004	20-oct-2012	5000	13800
Sb14	Sb	18-may-2005	18-may-2009	2000	17000
Sb15	Sb	15-apr-2002	15-apr-2007	20000	73600
Rd01	Rd	03-mar-2006	03-mar-2009	8000	40000
Rd02	Rd	04-jun-2007	04-jun-2008	9000	37000
Rd03	Rd	11-feb-2005	11-feb-2010	5000	59000
Rd04	Rd	12-apr-2004	12-apr-2008	70000	77000
Rd05	Rd	29-apr-2005	29-apr-2012	30000	53000
Rd06	Rd	01-jan-2007	01-jan-2010	25000	56000

Loan:

Attribute	Data Type	Abbreviations
Lacno	Varchar	Loan account number
Ltype	Varchar	Type of loan account
Ldate	Date	Date on which the loan account is opened
Lmdate	Date	Maturity date of the loan
Lamt	Number	Loan amount at the time of account opening
Lmamnt	Number	Maturity amount of the loan

Loan:

locno	ltype	ldate	lmdate	lamt	lmamt
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Hm01	Home	12-feb-2006	12-feb-2011	200000	480000
Hm02	Home	02-mar-2004	02-mar-2009	500000	680000
Hm03	Home	12-feb-2006	12-feb-2016	700000	1000000
Hm04	Home	03-jan-2005	03-jan-2020	1200000	12300000
Cr01	Car	01-apr-2006	01-apr-2011	200000	500000
Cr02	Car	05-feb-2004	05-feb-2007	400000	700000
Cr03	Car	12-feb-2006	12-feb-2010	300000	67788888
Pr01	Personal	01-jan-2004	01-jan-2010	500000	700000
Pr02	Personal	02-mar-2004	02-mar-2009	400000	7800000
Pr03	Personal	10-feb-2005	10-feb-2010	1000000	89000000
Pr04	Personal	15-apr-2005	15-apr-2010	450000	4800000
Pr05	Personal	20-apr-2006	01-mar-2010	300000	5600000
Cr01	Computer	01-mar-2005	02-mar-2009	500000	7000000
Cr02	Computer	02-mar-2005	08-feb-2013	400000	800000
Cr03	Computer	08-feb-2003	12-apr-2014	345000	7800000
Ed01	Education	12-apr-2006	03-apr-2015	567894	78000000
Ed02	Education	03-apr-2005	08-dec-2013	450000	8900000
Ed03	Education	04-apr-2006	10-nov-2020	600000	8900000

Relationship:

Relationship	Primary Key	Foreign key	Reference entity	Relationship Attribute
Accounts_in	Bcode+Cid	cid→bcode	Customer,bank_brn	Nil
Saves	Cid+Dacno	cid→dacno	Customer,deposit	Nil
Borrows	Cid+Lacno	cid→lacno	Customer, loan	Nil

Account in:

<u>Cid</u>	<u>Bcode</u>
100	110
100	210
150	110
200	310
200	420
200	120
250	410

250	110
300	120
350	210
400	420
400	310
450	110
450	310
450	420
500	120
550	110
550	110
550	310
550	410

Saves:

<u>Cid</u>	<u>Dacno</u>
100	Sb01
100	Fd01
100	Rd01
150	Sb02
150	Sb01
150	Rd02
200	Sb03
200	Fd02
200	Fd08
250	Sb04
250	Sb12
250	Fd03
250	Rd04
300	Sb05
300	Sb07
300	Fd05
350	Sb06
350	Rd03
400	Sb08
450	Sb09

450	Fd06
500	Sb10
500	Rd05
550	Sb13
550	Sb14
550	Rd06
550	Rd08

Borrows:

cid	lacno
100	Hm01
100	Pr01
100	Cr01
200	Pr03
200	Cr02
250	Pr04
250	Ed02
300	Hm02
300	Ed01
350	Pr05
350	Cr03
400	Hm03
400	Cr02
450	Hm04
450	Ed03
450	Cr03
500	Pr02
500	Cr01

Queries:

- 1) List the customers of Mumbai city.

- 2) List the male customers of Kolkata city.
- 3) List the youngest male customer of Chennai city.
- 4) List the state having more than one branch.
- 5) List the deposit schemes provided by the bank of the customers.
- 6) List the year wise opening status of savings account.
- 7) List the interest earned by customer per annum in the FD scheme that is continued for 10 years along with the FD account number.
- 8) List the interest earned by customer per annum in the RD scheme that is continued for 5 years along with the RD account number.
- 9) List the bank deposit schemes opened between year 2002 and 2006
- 10) List the deposit account number, the month and amount in which the deposit scheme (FD or RD) having maximum deposit is opened.
- 11) List the account number tenure and amount of that savings bank deposit scheme in which minimum amount is deposited.
- 12) List the maximum loan type is disbursed by the bank branches.
- 13) List the loan account number, tenure, interest earned by the bank for a home loan that has lasted for longest tenure.
- 14) List the account number, loan type of the loans in which the tenure is 10 years or more.
- 15) List the account number and interest earned per month on a car loan that has issues for a minimum time period.
- 16) List the customer having accounts in Chennai branch.
- 17) List the customers having more than one account.
- 18) List the customers having named same but different account numbers.
- 19) List the name of the youngest female customer of Mumbai having more than one deposit account.
- 20) List the deposit account details of the youngest male customer of Kolkata.
- 21) List the customer name that is having maximum deposit account in bank.
- 22) List the branch code, branch location, customer name, deposit account number, deposit amount and deposit date of that branch that belongs to Delhi and having FD account.
- 23) List the customer who has borrowed highest amount of home loan.
- 24) List the date wise disbursement of loan by Chennai branch.

- 25) List the customer who has taken personal loan of minimum amount.
- 26) List the customer who has not taken any loan.
- 27) List the customers who have taken more than one loan.
- 28) List the loan details of those loans that were issued in the month of march2004
- 29) List the loan details those loans that are taken by more than one customer.
- 30) List the customer who has taken loan on the same date.
- 31) List the customers who have opened RD account in the year 2007.
- 32) List the branch name, which has opened FD account after 2004.