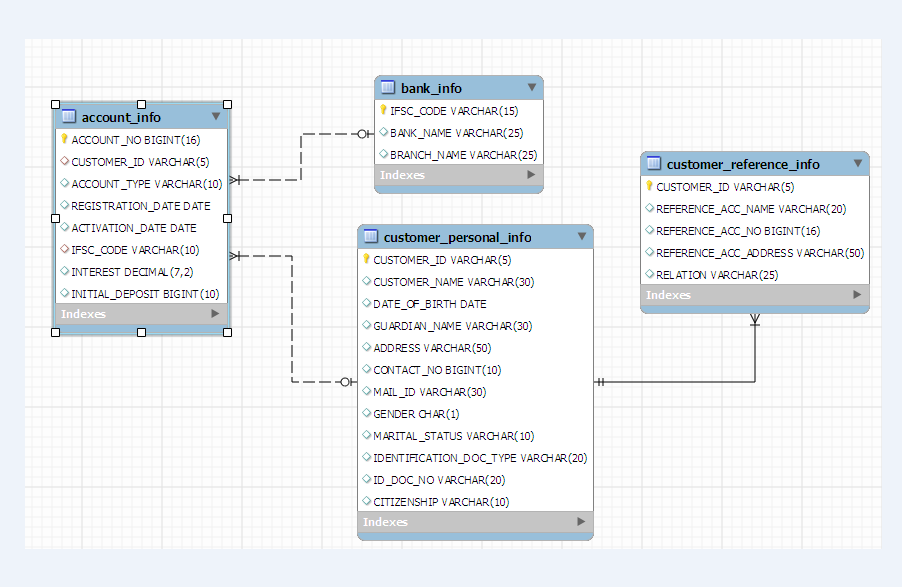
**BANK MANGEMENT SYSTEM**



**DDL COMMANDS**

create DATABASE BMS\_DB;

use BMS\_DB;

-- CUSTOMER\_PERSONAL\_INFO

CREATE TABLE CUSTOMER\_PERSONAL\_INFO

(

CUSTOMER\_ID VARCHAR(5),

CUSTOMER\_NAME VARCHAR(30),

DATE\_OF\_BIRTH DATE,

GUARDIAN\_NAME VARCHAR(30),

ADDRESS VARCHAR(50),

CONTACT\_NO BIGINT(10),

MAIL\_ID VARCHAR(30),

GENDER CHAR(1),

MARITAL\_STATUS VARCHAR(10),

IDENTIFICATION\_DOC\_TYPE VARCHAR(20),

ID\_DOC\_NO VARCHAR(20),

CITIZENSHIP VARCHAR(10),

CONSTRAINT CUST\_PERS\_INFO\_PK PRIMARY KEY(CUSTOMER\_ID)

);

-- CUSTOMER\_REFERENCE\_INFO

CREATE TABLE CUSTOMER\_REFERENCE\_INFO

(

CUSTOMER\_ID VARCHAR(5),

REFERENCE\_ACC\_NAME VARCHAR(20),

REFERENCE\_ACC\_NO BIGINT(16),

REFERENCE\_ACC\_ADDRESS VARCHAR(50),

RELATION VARCHAR(25),

CONSTRAINT CUST\_REF\_INFO\_PK PRIMARY KEY(CUSTOMER\_ID),

CONSTRAINT CUST\_REF\_INFO\_FK FOREIGN KEY(CUSTOMER\_ID) REFERENCES CUSTOMER\_PERSONAL\_INFO(CUSTOMER\_ID)

);

-- BANK\_INFO

CREATE TABLE BANK\_INFO

(

IFSC\_CODE VARCHAR(15),

BANK\_NAME VARCHAR(25),

BRANCH\_NAME VARCHAR(25),

CONSTRAINT BANK\_INFO\_PK PRIMARY KEY(IFSC\_CODE)

);

-- ACCOUNT\_INFO

CREATE TABLE ACCOUNT\_INFO

(

ACCOUNT\_NO BIGINT(16),

CUSTOMER\_ID VARCHAR(5),

ACCOUNT\_TYPE VARCHAR(10),

REGISTRATION\_DATE DATE,

ACTIVATION\_DATE DATE,

IFSC\_CODE VARCHAR(10),

INTEREST DECIMAL(7,2),

INITIAL\_DEPOSIT BIGINT(10),

CONSTRAINT ACC\_INFO\_PK PRIMARY KEY(ACCOUNT\_NO),

CONSTRAINT ACC\_INFO\_PERS\_FK FOREIGN KEY(CUSTOMER\_ID) REFERENCES CUSTOMER\_PERSONAL\_INFO(CUSTOMER\_ID),

CONSTRAINT ACC\_INFO\_BANK\_FK FOREIGN KEY(IFSC\_CODE) REFERENCES BANK\_INFO(IFSC\_CODE)

);

**DML COMMANDS**

-- BANK\_INFO

INSERT INTO BANK\_INFO(IFSC\_CODE,BANK\_NAME,BRANCH\_NAME)VALUES('HDVL0012','HDFC','VALASARAVAKKAM');

INSERT INTO BANK\_INFO(IFSC\_CODE,BANK\_NAME,BRANCH\_NAME) VALUES('SBITN0123','SBI','TNAGAR');

INSERT INTO BANK\_INFO(IFSC\_CODE,BANK\_NAME,BRANCH\_NAME) VALUES('ICITN0232','ICICI','TNAGAR');

INSERT INTO BANK\_INFO(IFSC\_CODE,BANK\_NAME,BRANCH\_NAME) VALUES('ICIPG0242','ICICI','PERUNGUDI');

INSERT INTO BANK\_INFO(IFSC\_CODE,BANK\_NAME,BRANCH\_NAME) VALUES('SBISD0113','SBI','SAIDAPET');

-- CUSTOMER\_PERSONAL\_INFO

INSERT INTO CUSTOMER\_PERSONAL\_INFO(CUSTOMER\_ID,CUSTOMER\_NAME,DATE\_OF\_BIRTH,GUARDIAN\_NAME,ADDRESS,CONTACT\_NO,MAIL\_ID,GENDER,MARITAL\_STATUS,IDENTIFICATION\_DOC\_TYPE,ID\_DOC\_NO,CITIZENSHIP) VALUES('C-001','JOHN','1984-05-03','PETER','NO.14, ST.MARKS ROAD,BANGALORE',9734526719,'JOHN\_123@gmail.com','M','SINGLE','PASSPORT','PASS123','INDIAN');

INSERT INTO CUSTOMER\_PERSONAL\_INFO(CUSTOMER\_ID,CUSTOMER\_NAME,DATE\_OF\_BIRTH,GUARDIAN\_NAME,ADDRESS,CONTACT\_NO,MAIL\_ID,GENDER,MARITAL\_STATUS,IDENTIFICATION\_DOC\_TYPE,ID\_DOC\_NO,CITIZENSHIP) VALUES('C-002','JAMES','1984-08-06','GEORGE','NO.18, MG ROAD,BANGALORE',9237893481,'JAMES\_123@gmail.com','M','MARRIED','PASSPORT','PASS124','INDIAN');

INSERT INTO CUSTOMER\_PERSONAL\_INFO(CUSTOMER\_ID,CUSTOMER\_NAME,DATE\_OF\_BIRTH,GUARDIAN\_NAME,ADDRESS,CONTACT\_NO,MAIL\_ID,GENDER,MARITAL\_STATUS,IDENTIFICATION\_DOC\_TYPE,ID\_DOC\_NO,CITIZENSHIP) VALUES('C-003','SUNITHA','1984-11-06','VINOD','NO.21, GM ROAD,CHENNAI',9438978389,'SUNITHA\_123@gmail.com','F','SINGLE','VOTER-ID','GMV1234','INDIAN');

INSERT INTO CUSTOMER\_PERSONAL\_INFO(CUSTOMER\_ID,CUSTOMER\_NAME,DATE\_OF\_BIRTH,GUARDIAN\_NAME,ADDRESS,CONTACT\_NO,MAIL\_ID,GENDER,MARITAL\_STATUS,IDENTIFICATION\_DOC\_TYPE,ID\_DOC\_NO,CITIZENSHIP) VALUES('C-004','RAMESH','1985-12-11','KRISHNAN','NO.14,LB ROAD,CHENNAI',9235234534,'RAMESH\_123@gmail.com','M','MARRIED','PASSPORT','PASS125','INDIAN');

INSERT INTO CUSTOMER\_PERSONAL\_INFO(CUSTOMER\_ID,CUSTOMER\_NAME,DATE\_OF\_BIRTH,GUARDIAN\_NAME,ADDRESS,CONTACT\_NO,MAIL\_ID,GENDER,MARITAL\_STATUS,IDENTIFICATION\_DOC\_TYPE,ID\_DOC\_NO,CITIZENSHIP) VALUES('C-005','KUMAR','1983-04-26','KIRAN','NO.18,MM ROAD,BANGALORE',9242342312,'KUMAR\_123@gmail.com','M','SINGLE','PASSPORT','PASS126','INDIAN');

-- CUSTOMER\_REFERENCE\_INFO

INSERT INTO CUSTOMER\_REFERENCE\_INFO(CUSTOMER\_ID,REFERENCE\_ACC\_NAME,REFERENCE\_ACC\_NO,REFERENCE\_ACC\_ADDRESS,RELATION) VALUES('C-001','RAM',0987654321122345,'NO.11,BRIGRADE ROAD,BANGALORE','FRIEND');

INSERT INTO CUSTOMER\_REFERENCE\_INFO(CUSTOMER\_ID,REFERENCE\_ACC\_NAME,REFERENCE\_ACC\_NO,REFERENCE\_ACC\_ADDRESS,RELATION) VALUES('C-002','RAGHUL',0987654321122346,'NO.21,CUNNGHAM ROAD,BANGALORE','FRIEND');

INSERT INTO CUSTOMER\_REFERENCE\_INFO(CUSTOMER\_ID,REFERENCE\_ACC\_NAME,REFERENCE\_ACC\_NO,REFERENCE\_ACC\_ADDRESS,RELATION) VALUES('C-003','GOKUL',0987654321122357,'NO.12,OMR,CHENNAI','NEIGHBOUR');

INSERT INTO CUSTOMER\_REFERENCE\_INFO(CUSTOMER\_ID,REFERENCE\_ACC\_NAME,REFERENCE\_ACC\_NO,REFERENCE\_ACC\_ADDRESS,RELATION) VALUES('C-004','RAHMAN',0987654321122348,'NO.35,ECR,CHENNAI','FRIEND');

INSERT INTO CUSTOMER\_REFERENCE\_INFO(CUSTOMER\_ID,REFERENCE\_ACC\_NAME,REFERENCE\_ACC\_NO,REFERENCE\_ACC\_ADDRESS,RELATION) VALUES('C-005','VIVEK',0987654321122359,'NO.78,JAYA NAGAR,BANGALORE','NEIGHBOUR');

-- ACCOUNT\_INFO

INSERT INTO ACCOUNT\_INFO(ACCOUNT\_NO,CUSTOMER\_ID,ACCOUNT\_TYPE,REGISTRATION\_DATE,ACTIVATION\_DATE,IFSC\_CODE,INTEREST, INITIAL\_DEPOSIT) VALUES(1234567898765432,'C-001','SAVINGS','2012-02-23','2012-02-28','HDVL0012',5,10000);

INSERT INTO ACCOUNT\_INFO(ACCOUNT\_NO,CUSTOMER\_ID,ACCOUNT\_TYPE,REGISTRATION\_DATE,ACTIVATION\_DATE,IFSC\_CODE,INTEREST, INITIAL\_DEPOSIT) VALUES(1234567898765433,'C-002','SALARY','2012-03-12','2012-03-17','SBITN0123',6,0 );

INSERT INTO ACCOUNT\_INFO(ACCOUNT\_NO,CUSTOMER\_ID,ACCOUNT\_TYPE,REGISTRATION\_DATE,ACTIVATION\_DATE,IFSC\_CODE,INTEREST, INITIAL\_DEPOSIT) VALUES(1234567898765434,'C-003','SAVINGS','2012-03-15','2012-03-20','ICITN0232',4,16000 );

INSERT INTO ACCOUNT\_INFO(ACCOUNT\_NO,CUSTOMER\_ID,ACCOUNT\_TYPE,REGISTRATION\_DATE,ACTIVATION\_DATE,IFSC\_CODE,INTEREST, INITIAL\_DEPOSIT) VALUES(1234567898765435,'C-004','SALARY','2012-04-05','2012-04-10','HDVL0012',7,0);

INSERT INTO ACCOUNT\_INFO(ACCOUNT\_NO,CUSTOMER\_ID,ACCOUNT\_TYPE,REGISTRATION\_DATE,ACTIVATION\_DATE,IFSC\_CODE,INTEREST, INITIAL\_DEPOSIT) VALUES(1234567898765436,'C-005','SAVINGS','2012-04-12','2012-04-17','SBISD0113',8,20000);

**QUESTIONS**

|  |
| --- |
| 1. Write a query which will display the customer id, account type they hold, their account number and bank name. |
| 1. Write a query which will display the customer id, account type and the account number of HDFC customers who registered after 12-JAN-2012 and before 04-APR-2012. |
| 1. Write a query which will display the customer id, customer name, account no, account type and bank name where the customers hold the account. |
| 1. Write a query which will display the customer id, customer name, gender, marital status along with the unique reference string and sort the records based on customer id in descending order.  <b>Hint: Generate unique reference string as mentioned below:  CustomerName\_Gender\_MaritalStatus <b> Example,   C-005 KUMAR M SINGLE KUMAR\_M\_SINGLE  Use "UNIQUE\_REF\_STRING" as alias name for displaying the unique reference string. |
| 1. Write a query which will display the account number, customer id, registration date, initial deposit amount of the customer whose initial deposit amount is within the range of Rs.15000 to Rs.25000. |
| 1. Write a query which will display customer id, customer name, date of birth, guardian name of the customers whose name starts with 'J'. |
| 1. Write a query which will display customer id, account number and passcode.  Hint: To generate passcode, join the last three digits of customer id and last four digit of account number.  Example C-001 1234567898765432 0015432 Use "PASSCODE" as alias name for displaying the passcode. |
| 1. Write a query which will display the customer id, customer name, date of birth, Marital Status, Gender, Guardian name, contact no and email id of the customers whose gender is male 'M' and marital status is MARRIED. |
| 1. Write a query which will display the customer id, customer name, guardian name, reference account holders name of the customers who are referenced / referred by their 'FRIEND'. |
| 1. Write a query to display the customer id, account number and interest amount in the below format with INTEREST\_AMT as alias name. Sort the result based on the INTEREST\_AMT in ascending order. Example: $5Hint: Need to prefix $ to interest amount and round the result without decimals. |
| 1. Write a query which will display the customer id, customer name, account no, account type, activation date, bank name whose account will be activated on '10-APR-2012' |
| 1. Write a query which will display account number, customer id, customer name, bank name, branch name, ifsc code, citizenship, interest and initial deposit amount of all the customers. |
| 1. Write a query which will display customer id, customer name, date of birth, guardian name, contact number, mail id and reference account holder's name of the customers who has submitted the passport as an identification document. |
| 1. Write a query to display the customer id, customer name, account number, account type, initial deposit, interest who have deposited maximum amount in the bank. |
| 1. Write a query to display the customer id, customer name, account number, account type, interest, bank name and initial deposit amount of the customers who are getting maximum interest rate. |
| 1. Write a query to display the customer id, customer name, account no, bank name, contact no and mail id of the customers who are from BANGALORE. |
| 1. Write a query which will display customer id, bank name, branch name, ifsc code, registration date, activation date of the customers whose activation date is in the month of march (March 1'st to March 31'st). |
| 1. Write a query which will calculate the interest amount and display it along with customer id, customer name, account number, account type, interest, and initial deposit amount.Hint :Formula for interest amount, calculate: ((interest/100) \* initial deposit amt) with column name 'interest\_amt' (alias) |
| 1. Write a query to display the customer id, customer name, date of birth, guardian name, contact number, mail id, reference name who has been referenced by 'RAGHUL'. |
| 1. Write a query which will display the customer id, customer name and contact number with ISD code of all customers in below mentioned format. Sort the result based on the customer id in descending order. Format for contact number is :   "+91-3digits-3digits-4digits"  Example: +91-924-234-2312  Use "CONTACT\_ISD" as alias name. |
| 1. Write a query which will display account number, account type, customer id, customer name, date of birth, guardian name, contact no, mail id , gender, reference account holders name, reference account holders account number, registration date, activation date, number of days between the registration date and activation date with alias name "NoofdaysforActivation", bank name, branch name and initial deposit for all the customers. |
| 1. Write a query which will display customer id, customer name, guardian name, identification doc type, reference account holders name, account type, ifsc code, bank name and current balance for the customers who has only the savings account.  Hint: Formula for calculating current balance is add the intital deposit amount and interest and display without any decimals. Use "CURRENT\_BALANCE" as alias name. |
| 1. Write a query which will display the customer id, customer name, account number, account type, interest, initial deposit; check the initial deposit, if initial deposit is 20000 then display "high", if initial deposit is 16000 display 'moderate', if initial deposit is 10000 display 'average', if initial deposit is 5000 display 'low', if initial deposit is 0 display 'very low' otherwise display 'invalid' and sort by interest in descending order. Hint: Name the column as "Deposit\_Status" (alias). Strictly follow the lower case for strings in this query. |
| 1. Write a query which will display customer id, customer name, account number, account type, bank name, ifsc code, initial deposit amount and new interest amount for the customers whose name starts with "J".   Hint: Formula for calculating "new interest amount" is if customers account type is savings then add 10 % on current interest amount to interest amount else display the current interest amount. Round the new interest amount to 2 decimals. Use "NEW\_INTEREST" as alias name for displaying the new interest amount. Example, Assume Jack has savings account and his current interest amount is 10.00, then the new interest amount is 11.00 i.e (10 + (10 \* 10/100)). |
| 1. Write query to display the customer id, customer name, account no, initial deposit, tax percentage as calculated below.Hint: If initial deposit = 0 then tax is '0%'If initial deposit &lt;= 10000 then tax is '3%' If initial deposit &gt; 10000 and initial deposit &lt; 20000 then tax is '5%' If initial deposit &gt;= 20000 and initial deposit&lt;=30000 then tax is '7%' If initial deposit &gt; 30000 then tax is '10%' Use the alias name 'taxPercentage' |