**6#**

conn system/system

**a)**

**BRANCH**

CREATE TABLE BRANCH

(

BRANCH\_NAME VARCHAR2(10),

BRANCH\_CITY VARCHAR2(10),

ASSETS REAL,

PRIMARY KEY(BRANCH\_NAME)

);

DESC BRANCH;

**ACCOUNT**

CREATE TABLE ACCOUNT

(

ACCOUNT\_NO INT,

BRANCH\_NAME VARCHAR2(10),

BALANCE REAL,

PRIMARY KEY (ACCOUNT\_NO),

FOREIGN KEY(BRANCH\_NAME) REFERENCES BRANCH (BRANCH\_NAME)

);

DESC ACCOUNT;

**CUSTOMER**

CREATE TABLE CUSTOMER

(

CUSTOMER\_NAME VARCHAR2(10),

CUSTOMER\_STREET VARCHAR2(10),

CUSTOMER\_CITY VARCHAR2(10),

PRIMARY KEY (CUSTOMER\_NAME)

);

DESC CUSTOMER;

**DEPOSITOR**

CREATE TABLE DEPOSITOR

(

CUSTOMER\_NAME VARCHAR2(10),

ACCOUNT\_NO INT,

FOREIGN KEY(ACCOUNT\_NO) REFERENCES ACCOUNT (ACCOUNT\_NO),

FOREIGN KEY(CUSTOMER\_NAME) REFERENCES CUSTOMER (CUSTOMER\_NAME)

);

DESC DEPOSITOR;

**LOAN**

CREATE TABLE LOAN

(

LOAN\_NUMBER INT,

BRANCH\_NAME VARCHAR2(10),

AMOUNT REAL,

PRIMARY KEY(LOAN\_NUMBER),

FOREIGN KEY(BRANCH\_NAME) REFERENCES BRANCH (BRANCH\_NAME)

);

DESC LOAN;

**BORROWER**

CREATE TABLE BORROWER

(

CUSTOMER\_NAME VARCHAR2(10),

LOAN\_NUMBER INT,

FOREIGN KEY (CUSTOMER\_NAME) REFERENCES CUSTOMER(CUSTOMER\_NAME),

FOREIGN KEY (LOAN\_NUMBER) REFERENCES LOAN (LOAN\_NUMBER)

);

DESC BORROWER;

**b)**

**BRANCH**

INSERT INTO BRANCH VALUES ('Branch\_1', 'Delhi', 5000);

INSERT INTO BRANCH VALUES ('Branch\_2', 'Delhi', 4000);

INSERT INTO BRANCH VALUES ('Branch\_3', 'Aligarh', 1000);

INSERT INTO BRANCH VALUES ('Branch\_4', 'Mumbai', 3000);

INSERT INTO BRANCH VALUES ('Branch\_5', 'Pune', 7000);

SELECT \* FROM BRANCH;

**ACCOUNT**

INSERT INTO ACCOUNT VALUES (1, 'Branch\_1', 2000);

INSERT INTO ACCOUNT VALUES (2, 'Branch\_1',9000);

INSERT INTO ACCOUNT VALUES (3, 'Branch\_2', 6000);

INSERT INTO ACCOUNT VALUES (4, 'Branch\_4', 8000);

INSERT INTO ACCOUNT VALUES (5, 'Branch\_5', 4500);

SELECT \* FROM ACCOUNT;

**CUSTOMER**

INSERT INTO CUSTOMER VALUES ('John', 'Street\_1', 'Delhi');

INSERT INTO CUSTOMER VALUES ('Mary', 'Street\_2', 'Delhi');

INSERT INTO CUSTOMER VALUES ('Harry', 'Street\_3', 'Aligarh');

INSERT INTO CUSTOMER VALUES ('Alex', 'Street\_4', 'Mumbai');

INSERT INTO CUSTOMER VALUES ('Chuck', 'Street\_5', 'Pune');

SELECT \* FROM CUSTOMER;

**DEPOSITOR**

INSERT INTO DEPOSITOR VALUES ('John', 1);

INSERT INTO DEPOSITOR VALUES ('John', 2);

INSERT INTO DEPOSITOR VALUES ('John', 3);

INSERT INTO DEPOSITOR VALUES ('Alex', 4);

INSERT INTO DEPOSITOR VALUES ('Chuck', 5);

SELECT \* FROM DEPOSITOR;

**LOAN**

INSERT INTO LOAN VALUES (11, 'Branch\_1',900);

INSERT INTO LOAN VALUES (12, 'Branch\_2',500);

INSERT INTO LOAN VALUES (13, 'Branch\_3',400);

INSERT INTO LOAN VALUES (14, 'Branch\_4',100);

INSERT INTO LOAN VALUES (15, 'Branch\_5',200);

SELECT \* FROM LOAN;

**BORROWER**

INSERT INTO BORROWER VALUES ('John', 11);

INSERT INTO BORROWER VALUES ('Mary',12);

INSERT INTO BORROWER VALUES ('Harry', 13);

INSERT INTO BORROWER VALUES ('Alex', 14);

INSERT INTO BORROWER VALUES ('Chuck', 15);

SELECT \* FROM BORROWER;

**c)**

SELECT \* FROM ACCOUNT;

SELECT \* FROM DEPOSITOR;

SELECT CUSTOMER.CUSTOMER\_NAME FROM CUSTOMER, DEPOSITOR, ACCOUNT, BRANCH WHERE (DEPOSITOR.CUSTOMER\_NAME=CUSTOMER.CUSTOMER\_NAME) AND (DEPOSITOR.ACCOUNT\_NO=ACCOUNT.ACCOUNT\_NO) AND (BRANCH.BRANCH\_NAME=ACCOUNT.BRANCH\_NAME) AND (BRANCH.BRANCH\_NAME='Branch\_1') GROUP BY CUSTOMER.CUSTOMER\_NAME HAVING COUNT (DEPOSITOR.ACCOUNT\_NO)>=2;

**Or**

SELECT DEPOSITOR.CUSTOMER\_NAME FROM DEPOSITOR, ACCOUNT, BRANCH WHERE ((DEPOSITOR.ACCOUNT\_NO=ACCOUNT.ACCOUNT\_NO) AND (BRANCH.BRANCH\_NAME='Branch\_1')) GROUP BY DEPOSITOR.CUSTOMER\_NAME HAVING COUNT (DEPOSITOR.ACCOUNT\_NO)>=2;

**d)**

SELECT \* FROM ACCOUNT;

SELECT \* FROM BRANCH;

SELECT \* FROM DEPOSITOR;

SELECT CUSTOMER. CUSTOMER\_NAME FROM CUSTOMER, DEPOSITOR, ACCOUNT, BRANCH WHERE (DEPOSITOR.CUSTOMER\_NAME=CUSTOMER.CUSTOMER\_NAME) AND (DEPOSITOR.ACCOUNT\_NO=ACCOUNT.ACCOUNT\_NO) AND (BRANCH.BRANCH\_NAME=ACCOUNT.BRANCH\_NAME) AND(BRANCH.BRANCH\_CITY='Delhi') GROUP BY CUSTOMER.CUSTOMER\_NAME;

**Or**

SELECT DEPOSITOR.CUSTOMER\_NAME FROM DEPOSITOR, ACCOUNT, BRANCH WHERE (DEPOSITOR.ACCOUNT\_NO=ACCOUNT.ACCOUNT\_NO) AND (BRANCH.BRANCH\_NAME=ACCOUNT.BRANCH\_NAME) AND(BRANCH.BRANCH\_CITY='Delhi') GROUP BY DEPOSITOR.CUSTOMER\_NAME;

**e)**

SELECT \* FROM ACCOUNT;

SELECT \* FROM DEPOSITOR;

DELETE FROM DEPOSITOR WHERE DEPOSITOR.ACCOUNT\_NO IN

(SELECT ACCOUNT\_NO FROM ACCOUNT

WHERE ACCOUNT.BRANCH\_NAME IN

(SELECT BRANCH\_NAME FROM BRANCH

WHERE BRANCH.BRANCH\_CITY='Delhi'));

DELETE FROM ACCOUNT WHERE ACCOUNT.BRANCH\_NAME IN

(SELECT BRANCH.BRANCH\_NAME FROM BRANCH

WHERE BRANCH.BRANCH\_CITY='Delhi');

SELECT \* FROM ACCOUNT;