Q1. Consider the following Entities and Relationship

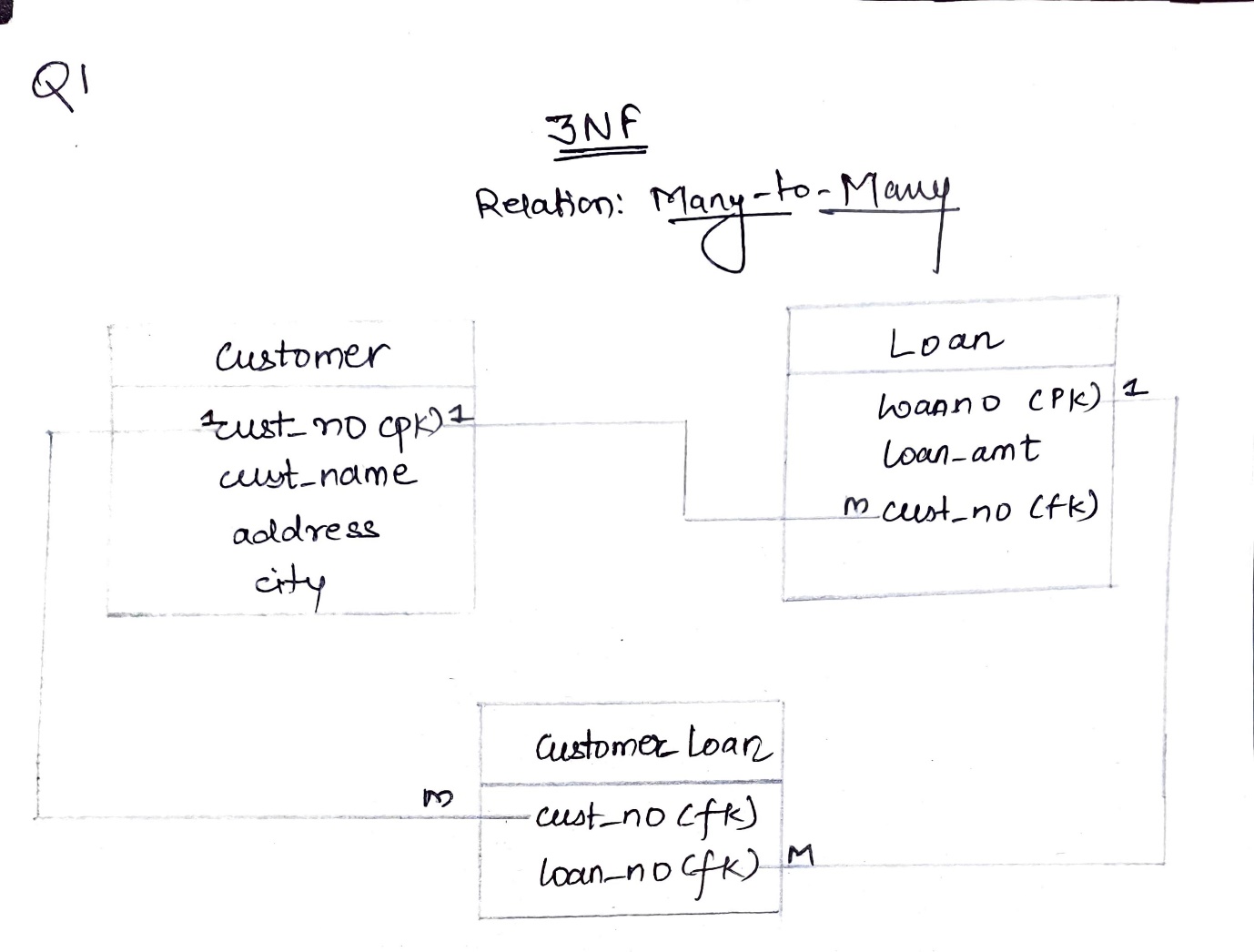
Customer (cust\_no,cust\_name,address,city)

Loan (loan\_no,loan\_amt)

Relation between Customer and Loan is Many to Many

Constraints: Primary Key, Foreign Key, loan\_amt should be>0

|  |
| --- |
|  |



Solution:

SQL> create table Customer

2 (cust\_no number(5) primary key,

3 cust\_name varchar2(50) NOT NULL,

4 address varchar2(100) NOT NULL,

5 city varchar2(30) NOT NULL);

Table created.

SQL> create table Loan

2 (loan\_no number(6) primary key,

3 loan\_amt number(10) NOT NULL CHECK (loan\_amt>0),

4 cust\_no number(5) references Customer(cust\_no));

Table created.

SQL> create table Customer\_Loan

2 (cust\_no number(5) references Customer(cust\_no),

3 loan\_no number(6) references Loan(loan\_no));

Table created.

SQL> describe Customer;

Name Null? Type

----------------------------------------- -------- ----------------------------

CUST\_NO NOT NULL NUMBER(5)

CUST\_NAME NOT NULL VARCHAR2(50)

ADDRESS NOT NULL VARCHAR2(100)

CITY NOT NULL VARCHAR2(30)

SQL> describe Loan;

Name Null? Type

----------------------------------------- -------- ----------------------------

LOAN\_NO NOT NULL NUMBER(6)

LOAN\_AMT NOT NULL NUMBER(10)

CUST\_NO NUMBER(5)

SQL> describe Customer\_Loan;

Name Null? Type

----------------------------------------- -------- ----------------------------

CUST\_NO NUMBER(5)

LOAN\_NO NUMBER(6)

SQL> insert into Customer values (10001,'Abhijeet Gawas','Dighi Pune-15','Pune');

1 row created.

SQL> insert into Customer values (10002,'Chaitainya Joshi','Nigdi Pradhikaran Pune-39','Pune');

1 row created.

SQL> insert into Customer values (10003,'Amon Rane','Borivali Andheri East','Mumbai');

1 row created.

SQL> insert into Customer values (10004,'Pratiksha Waikar','Deravali Old Panvel','Mumbai');

1 row created.

SQL> insert into Customer values (10005,'Mayank Kulkarni','Niphad','Nashik');

1 row created.

SQL> insert into Customer values (10006,'Manisha Kendre','Igatpuri','Nashik');

1 row created.

SQL> insert into Customer values (10007,'Momita Banerji','Ajara','Kolhapur');

1 row created.

SQL> insert into Customer values (10008,'Prateek Joshi','Shahuwadi','Kolhapur');

1 row created.

SQL> insert into Customer values (10009,'Mansi Adhikari','Shahuwadi','Kolhapur');

1 row created.

SQL> insert into Customer values (10010,'Shyam Lalit','Manmad','Nashik');

1 row created.

SQL> select \* from Customer;

CUST\_NO CUST\_NAME

---------- --------------------------------------------------

ADDRESS

--------------------------------------------------------------------------------

CITY

------------------------------

10001 Abhijeet Gawas

Dighi Pune-15

Pune

10002 Chaitainya Joshi

Nigdi Pradhikaran Pune-39

Pune

CUST\_NO CUST\_NAME

---------- --------------------------------------------------

ADDRESS

--------------------------------------------------------------------------------

CITY

------------------------------

10003 Amon Rane

Borivali Andheri East

Mumbai

10004 Pratiksha Waikar

Deravali Old Panvel

CUST\_NO CUST\_NAME

---------- --------------------------------------------------

ADDRESS

--------------------------------------------------------------------------------

CITY

------------------------------

Mumbai

10005 Mayank Kulkarni

Niphad

Nashik

10006 Manisha Kendre

CUST\_NO CUST\_NAME

---------- --------------------------------------------------

ADDRESS

--------------------------------------------------------------------------------

CITY

------------------------------

Igatpuri

Nashik

10007 Momita Banerji

Ajara

Kolhapur

CUST\_NO CUST\_NAME

---------- --------------------------------------------------

ADDRESS

--------------------------------------------------------------------------------

CITY

------------------------------

10008 Prateek Joshi

Shahuwadi

Kolhapur

10009 Mansi Adhikari

Shahuwadi

Kolhapur

CUST\_NO CUST\_NAME

---------- --------------------------------------------------

ADDRESS

--------------------------------------------------------------------------------

CITY

------------------------------

10010 Shyam Lalit

Manmad

Nashik

10 rows selected.

SQL> insert into Loan values (1001,1500000,10001);

1 row created.

SQL> insert into Loan values (1002,1700000,10002);

1 row created.

SQL> insert into Loan values (1003,1750000,10003);

1 row created.

SQL> insert into Loan values (1004,2650000,10004);

1 row created.

SQL> insert into Loan values (1005,1250000,10005);

1 row created.

SQL> insert into Loan values (1006,250000,10006);

1 row created.

SQL> insert into Loan values (1007,50000,10007);

1 row created.

SQL> insert into Loan values (1008,120000,10008);

1 row created.

SQL> insert into Loan values (1009,20000,10009);

1 row created.

SQL> insert into Loan values (1010,5000000,10010);

1 row created.

SQL> select \* from Loan;

LOAN\_NO LOAN\_AMT CUST\_NO

---------- ---------- ----------

1001 1500000 10001

1002 1700000 10002

1003 1750000 10003

1004 2650000 10004

1005 1250000 10005

1006 250000 10006

1007 50000 10007

1008 120000 10008

1009 20000 10009

1010 5000000 10010

10 rows selected.

SQL> insert into Customer\_Loan values (10001,1001);

1 row created.

SQL> insert into Customer\_Loan values (10002,1002);

1 row created.

SQL> insert into Customer\_Loan values (10003,1003);

1 row created.

SQL> insert into Customer\_Loan values (10004,1004);

1 row created.

SQL> insert into Customer\_Loan values (10005,1005);

1 row created.

SQL> insert into Customer\_Loan values (10006,1006);

1 row created.

SQL> insert into Customer\_Loan values (10007,1007);

1 row created.

SQL> insert into Customer\_Loan values (10008,1008);

1 row created.

SQL> insert into Customer\_Loan values (10009,1009);

1 row created.

SQL> insert into Customer\_Loan values (10010,1010);

1 row created.

SQL> select \* from Customer\_Loan;

CUST\_NO LOAN\_NO

---------- ----------

10001 1001

10002 1002

10003 1003

10004 1004

10005 1005

10006 1006

10007 1007

10008 1008

10009 1009

10010 1010

10 rows selected.

Q1. Find Details of All Customers whose Loan is greater than 10 Lakhs.

Sol:

SQL> select Customer.cust\_no, Customer.cust\_name, Customer.address, Customer.city, Loan.loan\_amt

2 from Customer,Loan, Customer\_Loan

3 where Customer.cust\_no = Customer\_Loan.cust\_no and Loan.loan\_no=Customer\_Loan.loan\_no and Loan.loan\_amt>1000000;

CUST\_NO CUST\_NAME

---------- --------------------------------------------------

ADDRESS

--------------------------------------------------------------------------------

CITY LOAN\_AMT

------------------------------ ----------

10001 Abhijeet Gawas

Dighi Pune-15

Pune 1500000

10002 Chaitainya Joshi

Nigdi Pradhikaran Pune-39

Pune 1700000

CUST\_NO CUST\_NAME

---------- --------------------------------------------------

ADDRESS

--------------------------------------------------------------------------------

CITY LOAN\_AMT

------------------------------ ----------

10003 Amon Rane

Borivali Andheri East

Mumbai 1750000

10004 Pratiksha Waikar

Deravali Old Panvel

CUST\_NO CUST\_NAME

---------- --------------------------------------------------

ADDRESS

--------------------------------------------------------------------------------

CITY LOAN\_AMT

------------------------------ ----------

Mumbai 2650000

10005 Mayank Kulkarni

Niphad

Nashik 1250000

10010 Shyam Lalit

CUST\_NO CUST\_NAME

---------- --------------------------------------------------

ADDRESS

--------------------------------------------------------------------------------

CITY LOAN\_AMT

------------------------------ ----------

Manmad

Nashik 5000000

6 rows selected.

Q2. List All Customer whose name start with ‘ba’

SQL> select \* from Customer where Customer.cust\_name like 'ba%';

no rows selected

Q3. List name of all customer in descending order who has taken loan in Nashik City

SQL> select Customer.cust\_no, Customer.cust\_name

2 from Customer, Loan, Customer\_Loan

3 where Customer.cust\_no = Customer\_Loan.cust\_no and Loan.loan\_no = Customer\_Loan.loan\_no

4 order by Customer.cust\_name desc;

CUST\_NO CUST\_NAME

---------- --------------------------------------------------

10010 Shyam Lalit

10004 Pratiksha Waikar

10008 Prateek Joshi

10007 Momita Banerji

10005 Mayank Kulkarni

10009 Mansi Adhikari

10006 Manisha Kendre

10002 Chaitainya Joshi

10003 Amon Rane

10001 Abhijeet Gawas

10 rows selected.

Q4. Display Customer Details having maximum Loan Amount

SQL> select Customer.cust\_no, Customer.cust\_name, Customer.address, Customer.city, Loan.loan\_amt

2 from Customer, Loan, Customer\_Loan

3 where Customer.cust\_no=Customer\_Loan.cust\_no and Loan.loan\_no = Customer\_Loan.loan\_no

4 and Loan.loan\_amt = (select max(loan\_amt) from Loan);

CUST\_NO CUST\_NAME

---------- --------------------------------------------------

ADDRESS

--------------------------------------------------------------------------------

CITY LOAN\_AMT

------------------------------ ----------

10010 Shyam Lalit

Manmad

Nashik 5000000

Q5. Calculate Total of All Loan Amount

SQL> select sum(Loan.loan\_amt) from Loan;

SUM(LOAN.LOAN\_AMT)

------------------

14290000

SQL> commit;

Commit complete.