

Conceptual Design using ER model

Task No :- 1

Date :- 29-07-25

- Banking management sys

Aim :- To design an entity-Relationship Diagram for a Banking Management system.

Steps to draw E-R Diagram :-

Step 1 :- Identifying the main entities

1. Customer
2. Account
3. Branch
4. Loan
5. credit-card
6. Banker-info

Step 2 :-

1. customer : customer-ID (PK), Name, Address, phone, e-mail.
2. Account : account-ID (PK), balance, category
3. Branch : Branch-ID (PK), Branch Name, Location, IFSC code.
4. Banker,info : Banker-name, Banker-ID (PK), banker-email.
5. Loan :- loan-ID (PK), amount, duration.
6. credit card :- credit-card number (PK), limit, expiry-date.

Step 3 :- Identifying Relationship b/w Entities

A customer can have multiple accounts (1-to-many)

An account is operated in one Branch (many-to-1)

A customer can have multiple loans (1-to-many)

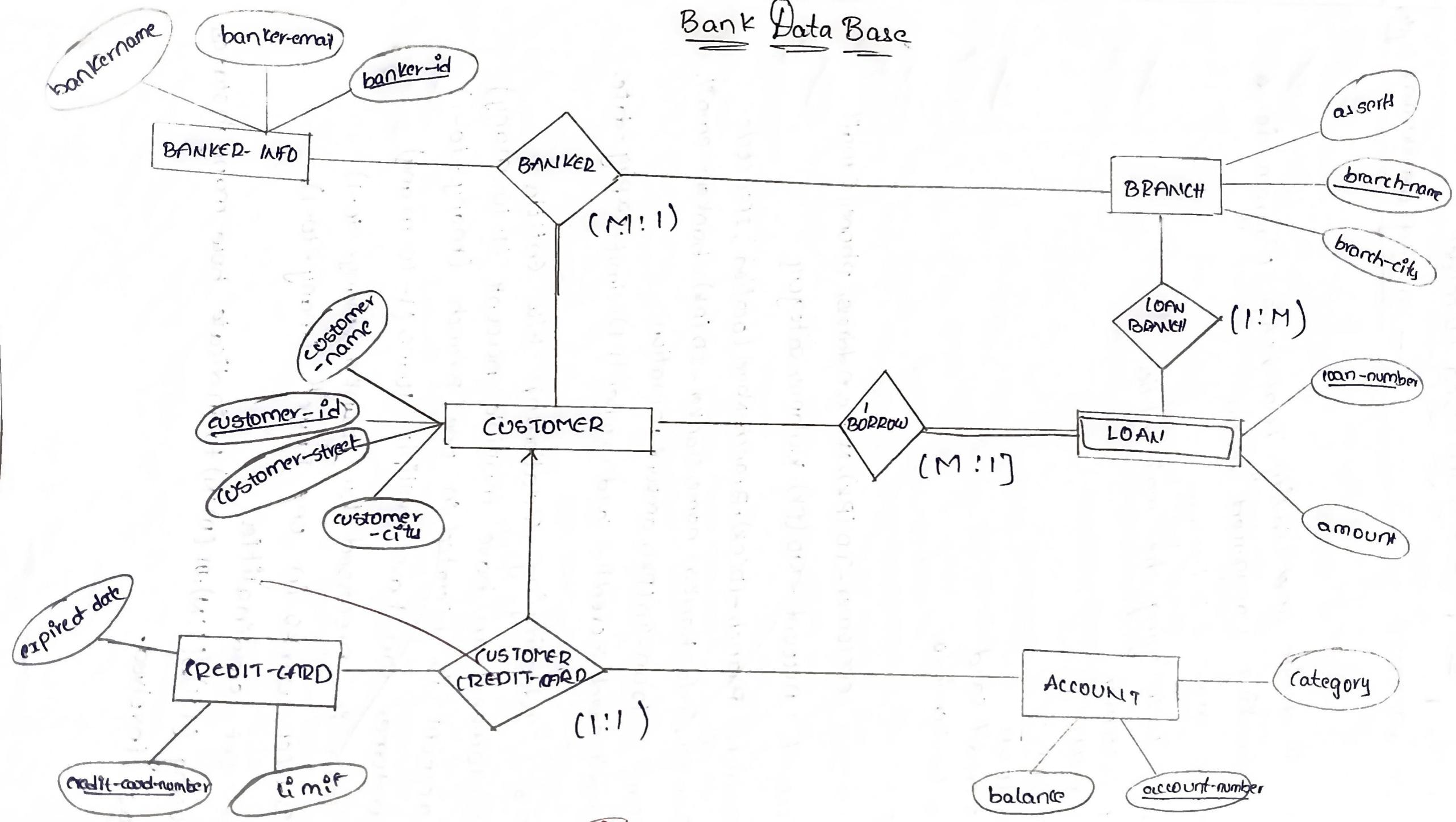
A loan is processed by Banker (many-to-1)

A Banker works in one Branch (many-to-1).

Step 4 :- Set cardinalities

using (1:1), (1:N), or (M:N) to indicate how many instances are involved.

Bank Data Base



Draw the ER diagram
Open draw.io website.

Draw diagram using:

Rectangles - for entities

Ellipses - for attributes

Diamonds for relationships

Lines to connect them

Underline the primary keys.

Input :-

Banking management system.

Output :-

entity relationship Diagram that clearly shows
All identified entities with attributes
All relationships with appropriate cardinalities
foreign keys and keys marked appropriately.

VEL TECH	
EX NO.	1
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	20
SIGN WITH DATE	

VEL TECH	
SIGN WITH DATE	
TOTAL (20)	
RECORD (5)	
VIVA VOCE (5)	
RESULT AND ANALYSIS (5)	
PERFORMANCE (5)	
EX NO	

Result :- Hence, the entity-Relationship diagram of Banking management system was successfully drawn using draw.io.

ER Diagram into Relational Model

Date : 29-08

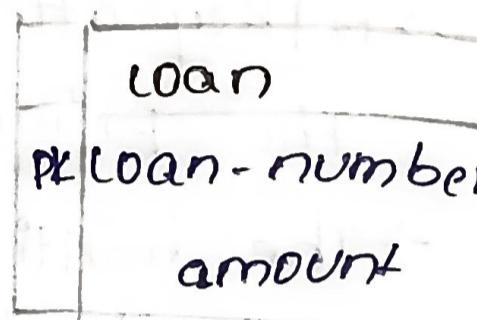
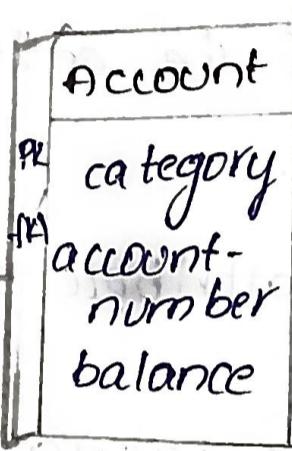
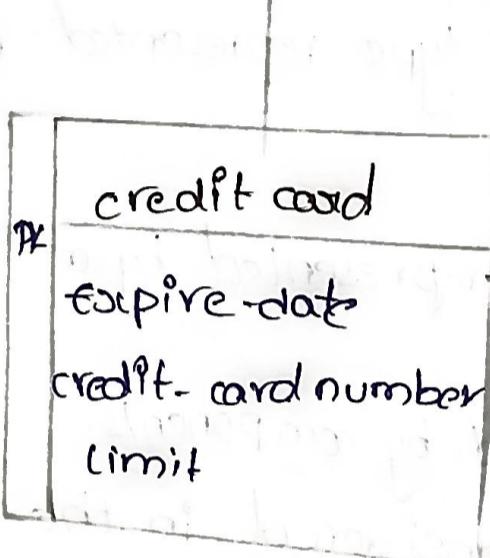
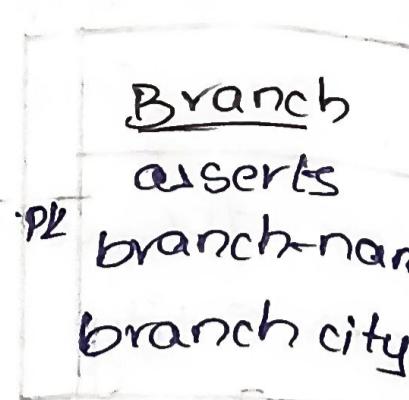
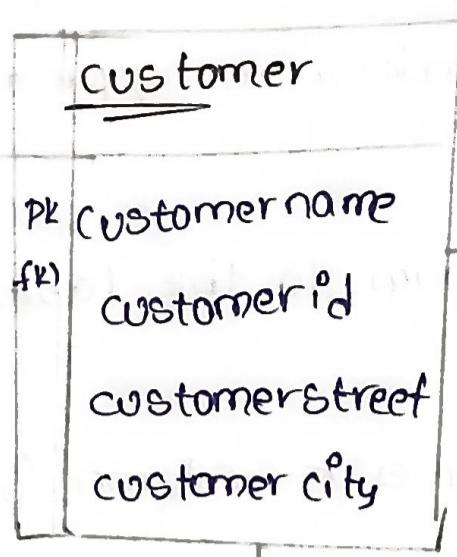
Task 1 :

Aim : Convert ER diagram into Banking management system into relational model.

Steps for converting the ER diagram to the table.

- Entity type becomes a table.
- All single-valued attribute becomes a column for the table.
- A key attribute of the entity type represented by the primary key.
- The multivalued attribute is represented by a separate table.
- composite attribute represented by components.
- Derived attributes are not considered in the table.

using these rules, you can convert the ER diagram to tables and columns and assign the mapping between the tables.



VEL TECH	
EX NO.	1
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	3
RECORD (5)	15
TOTAL (20)	28
SIGN WITH DATE	28/7/17

Result:- Hence conversion of diagram into Banking management system into relational model is successfully drawn.