Date:- 29/7/24

Task-11 Mobile phone purchase

The Entity Relationship (ER) diagram for a mobile phone Purchas and Biling Management system that maintains details of customer.

Aim:- TO design an Entity Relationship (ER) diagram for a mobile phone purchas and Biling management System that maintain details of customers, mobiles, biling and logic credensials for administrative purpose.

Algorithm:-

step 1:- start

Step 2:- Identify the main Entities.

* Customers
* mobile
* Bill
* Logic

step3:- Identify the Atributes for each Entity

* Customers:- CustID, CustName, city, phone. No. Amount Paid
* Mobile:- phone ID, mobile Name, mobile Price
* Bill:- Bid, Cust name, Price
* Logic:- Admin ID, Password (Pw)

step 4:- Identify Relationship Between Entities

* Customer - purchase - Mobile: A custome can Purchase are or more mobile

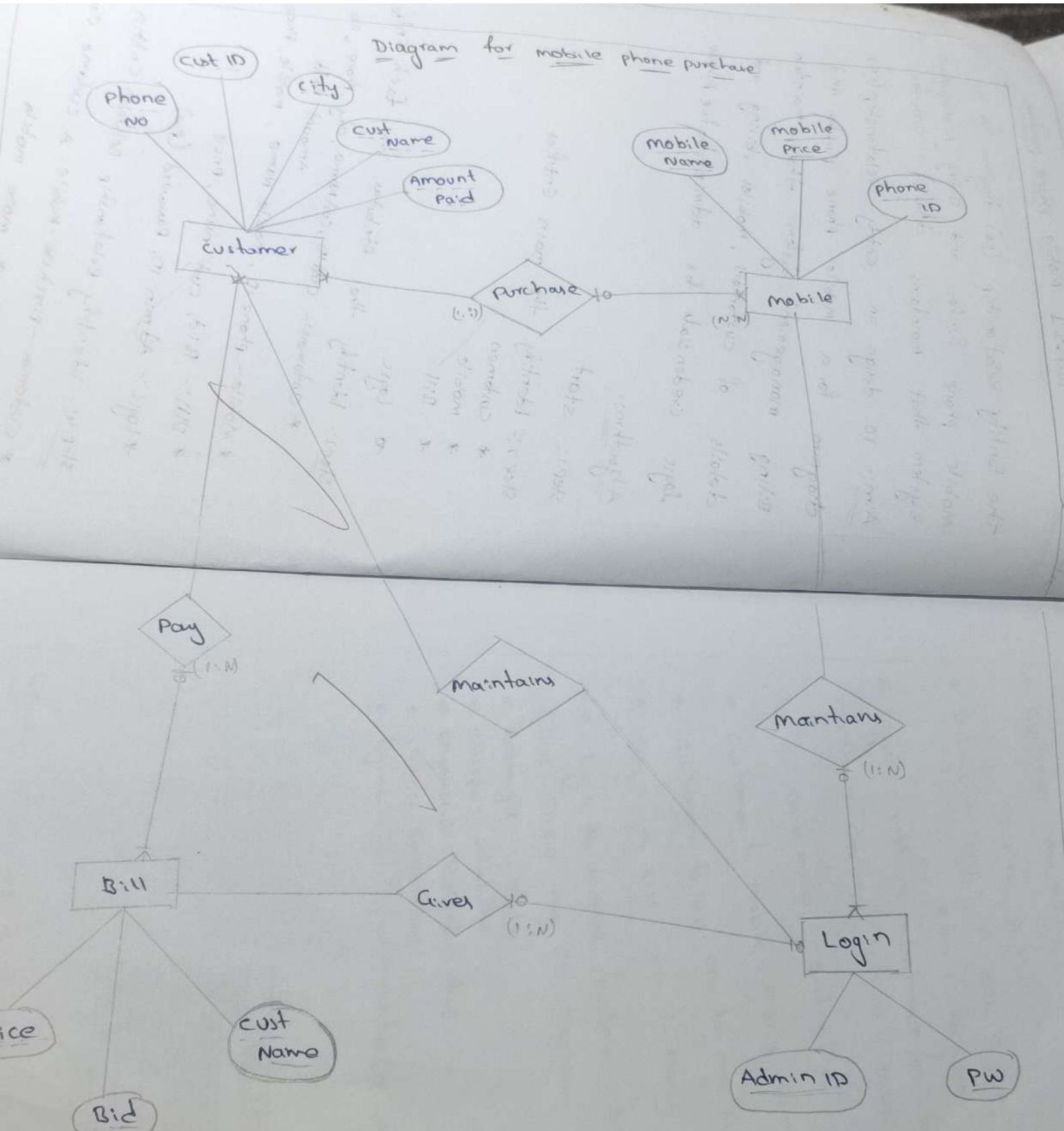


Diagram for mobile phone purchase
Cust ID
City
Phone NO
Cust Name
Amount Paid
Customer
Purchase
(1:1)
(N:N)
Mobile
Mobile Name
Mobile Price
Phone ID
Pay
(1:N)
Maintains
Maintans
(1:N)
Bill
Gives
(1:N)
Login
Cust Name
Bid
Admin ID
PW

* Customer - pay - bill :- A customer pays and receives a bill
* Bill - given - logic :- A bill is given by login/admin account
* Logic - maintains - customer / mobile :- Admin maintain customer and mobile data

step 5 :- Determine cardinality.

* Customer to mobile : many - to many (via Purchase)
* Customer to Bill : one - to - one or one - to many
* logic to Bill :- one - to - many
* Logic to mobile / customer :- one - to - many

Steps :- Draw the ER Diagram

* Rectangle :- Entities
* ellipse :- Attributes
* Diamond :- Relation ship
* Liner :- Connections
* symbol (11, 0) :- (ordinalities (eg. one, many, optional)

VEL TECH	
EX NO.	4
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	-
TOTAL (20)	10
SIGN WITH DATE	

28/3/25

Result :- Thus, the to design an entity Relationship diagram for a mobile phone purchase and Billing management is successfully verified.

Date 29/7/25 Task 12

Convert ER Diagram into Relationship model

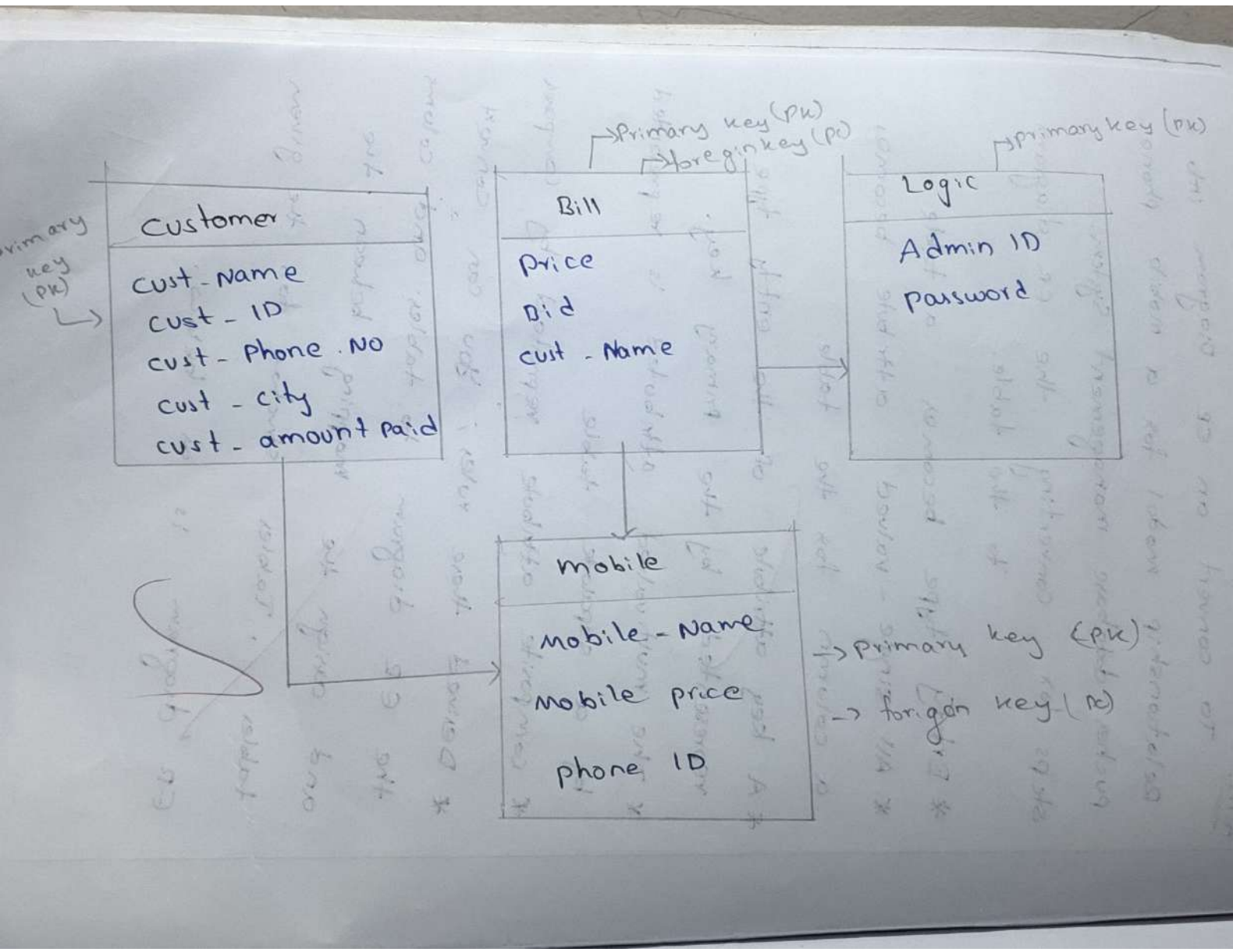
Aim:-

To convert an ER Diagram into a Relationship model for a mobile phone purchase database management system.

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 attributed is represented by a separate table
* composite attribute repreted by composed

* Derived there rules, you can convert the ER diagram to tables and colums and assign the mapping between the tables. Tables structure for the given ER diagram is as below.


Primary key (PK)
Foreign key (FK)
Primary key (PK)
Primary key (PK)
Customer
Cust - Name
Cust - ID
Cust - Phone . NO
Cust - City
Cust - amount Paid
Bill
Price
Did
Cust - Name
Logic
Admin ID
Password
Mobile
Mobile - Name
Mobile price
phone ID
-> Primary key (PK)
-> foreign key (FK)

VEL TECH	
EX NO.	4
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	0
RECORD (5)	-
TOTAL (20)	10
ON WITH DATE	

Result:-

Thus, the conversion of ER Diagram into in Relation ship model for a mobile phone purches data base management system was drawn succesfully.