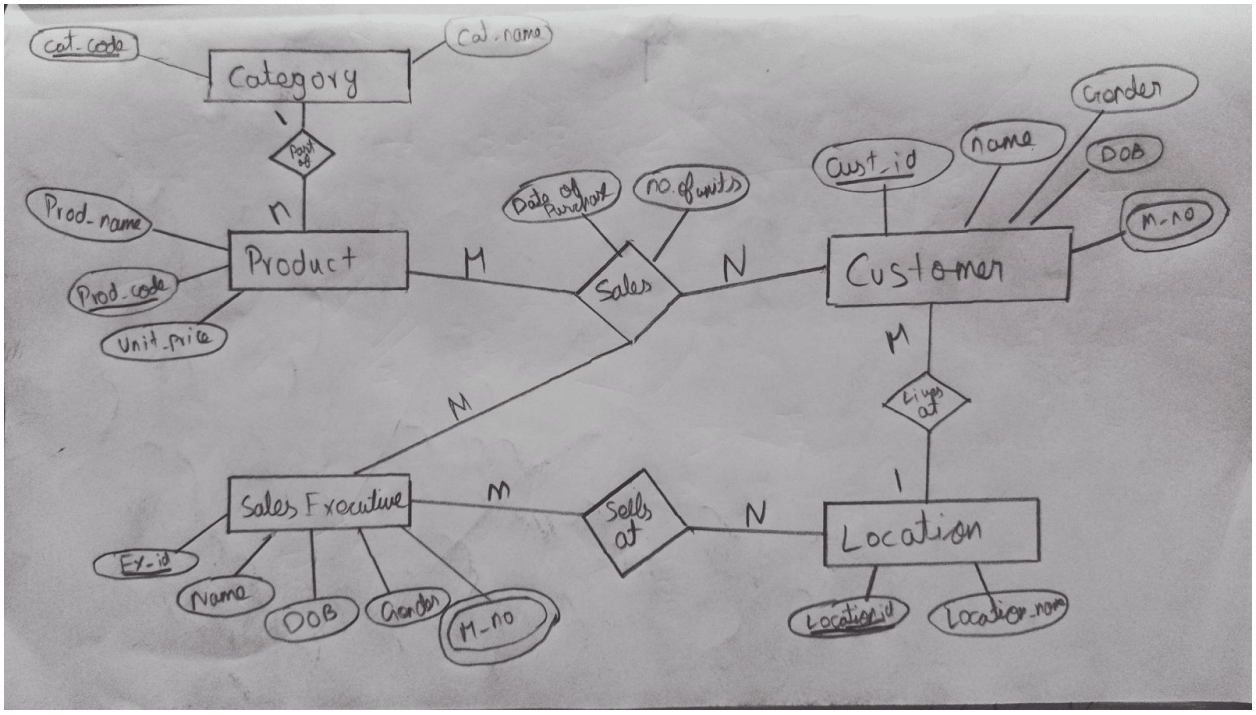
RDBMS Assignment

Name: Maithreyan Kesavan

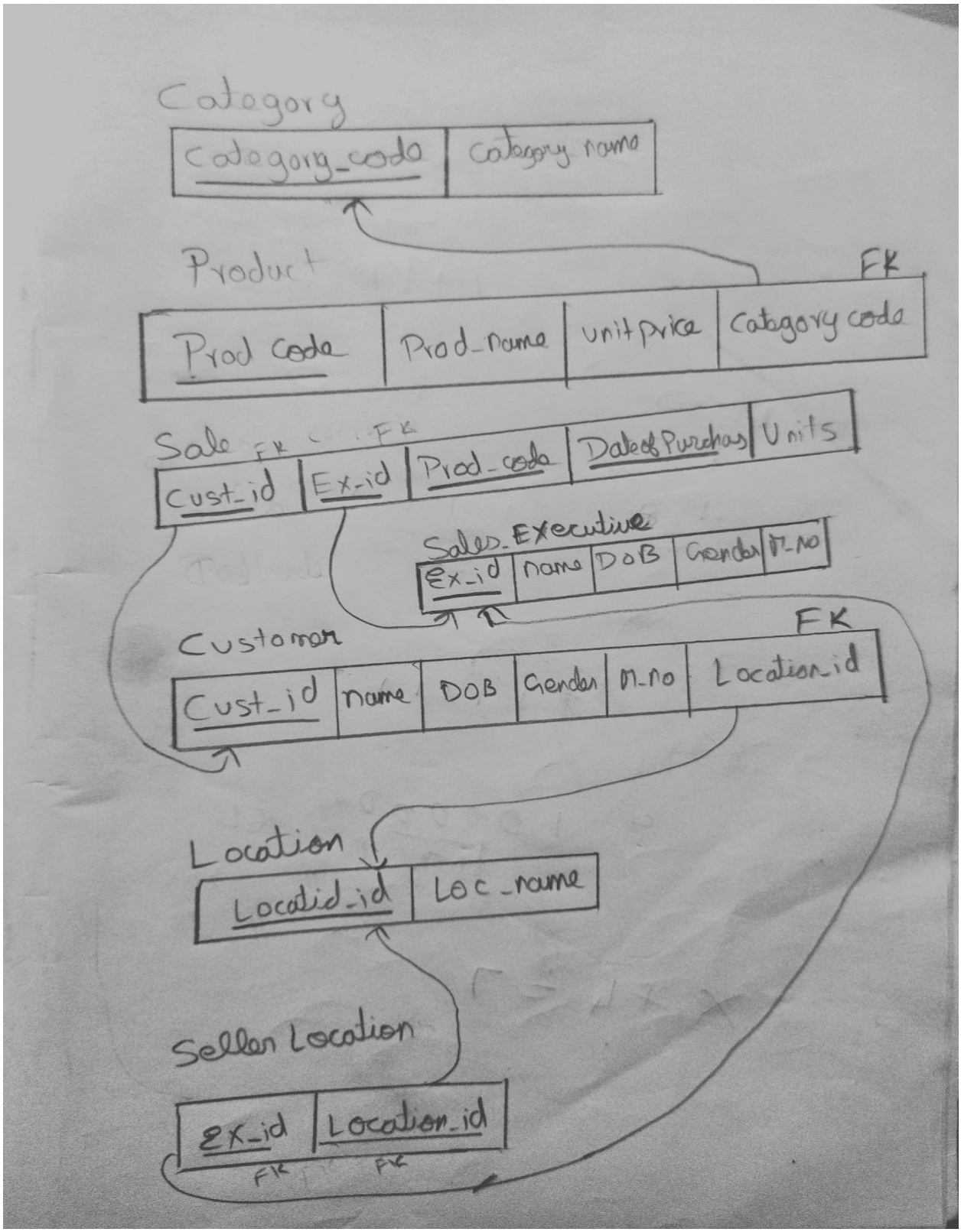
Hamen's private limited markets and sells different products. The attributes of the product include produce code, product name, and unit price. Products are grouped into categories. A product belongs to one category. A category can have many products. The attributes of category include category code and category name. Sales executives in the company are responsible for marketing and selling products to customers residing in different locations. The attributes of sales executives include sales executive id, name , date born, gender and mobile number. The attributes of the customer include customer id, name, date born, gender, and mobile number. The attributes of location include location code and location name. A location can have many sales executive marketing and selling different categories of products. The products purchased by the customers, date of purchase and number of units purchased have to be kept track.

1. Model an ER diagram for above scenarios
   Use any ER tool or draw by hand hand (anything is fine)
2. Transform the ER diagram to relations (tables)
3. Relations should be normalised as possible

1)ER - Diagram for Hamen's private limited



2)ER to Relation



3) Normalizing Relation

1NF - No Multivalued or Composite Attributes

Mobile No is Multi valued

New Table for Customer Mobile no

customer_id	Mobile_no

New Table for Sales Executive Mobile no

Salex_ex_id	Mobile_no

2NF

There is **No Partial Dependence** in any of the tables

(PK,CK){cat_code} ->{cat_name}

(PK,CK){customer_id} -> {customer_name,dob,gender,location}

(PK,CK) {customer_id,sales_ex_id,date_of_purchase,prod_id} ->{units}

(PK,CK){sales_ex_id} -> {sales_ex_name,dob,gender}

3NF

no transition dependency exists