

ASSIGNMENT 1

ER DIAGRAMS

Q1. Develop an ER diagram for a multi-tiered e-commerce platform, considering entities like products, orders, customers, and suppliers, and their interrelationships.

Ans: Creating an ER diagram for a multi-tiered e-commerce

1. Entities:

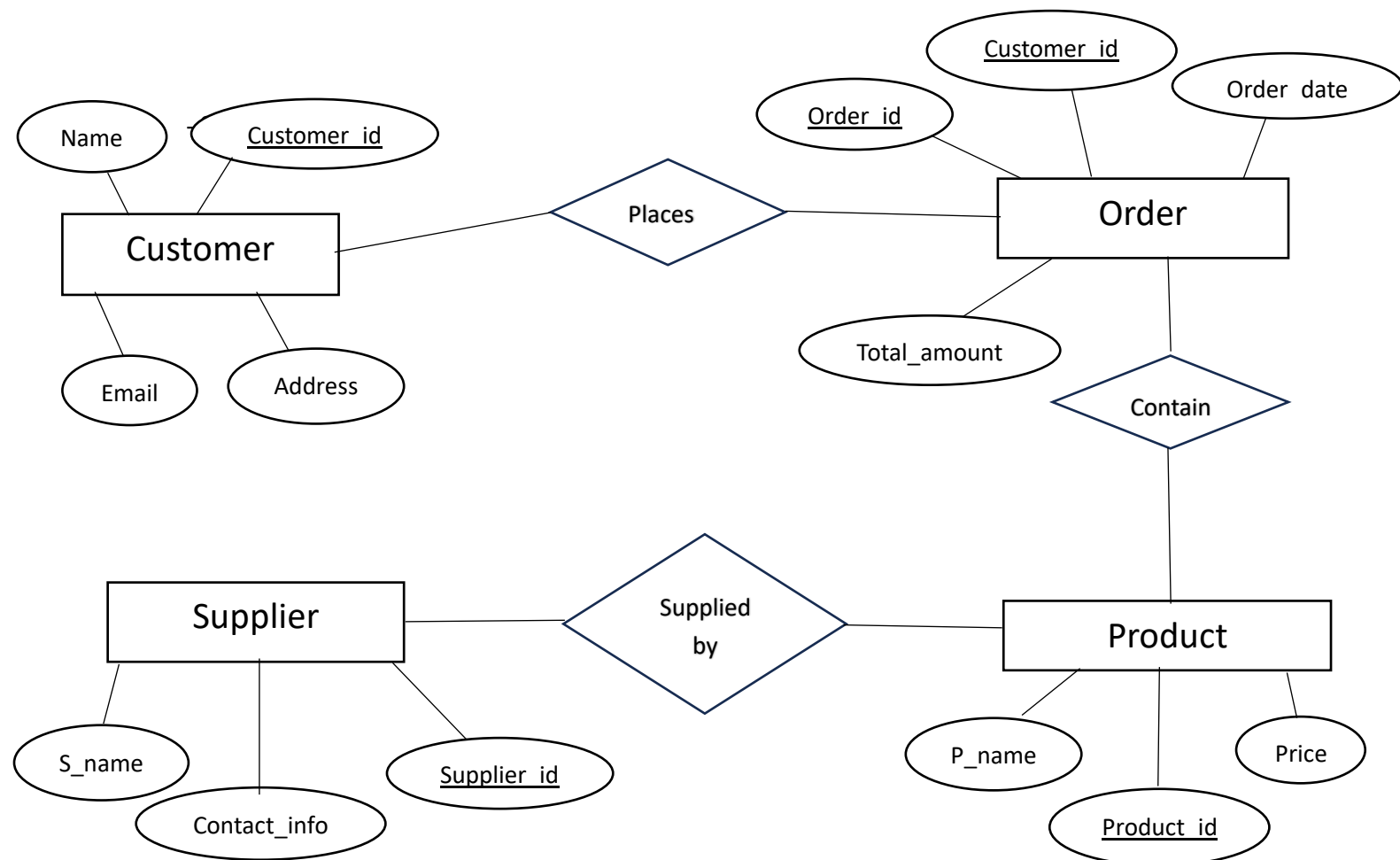
- Customer
- Product
- Order
- Supplier

2. Relationships:

- Customer places Order
- Product supplied by Supplier
- Order contain Product

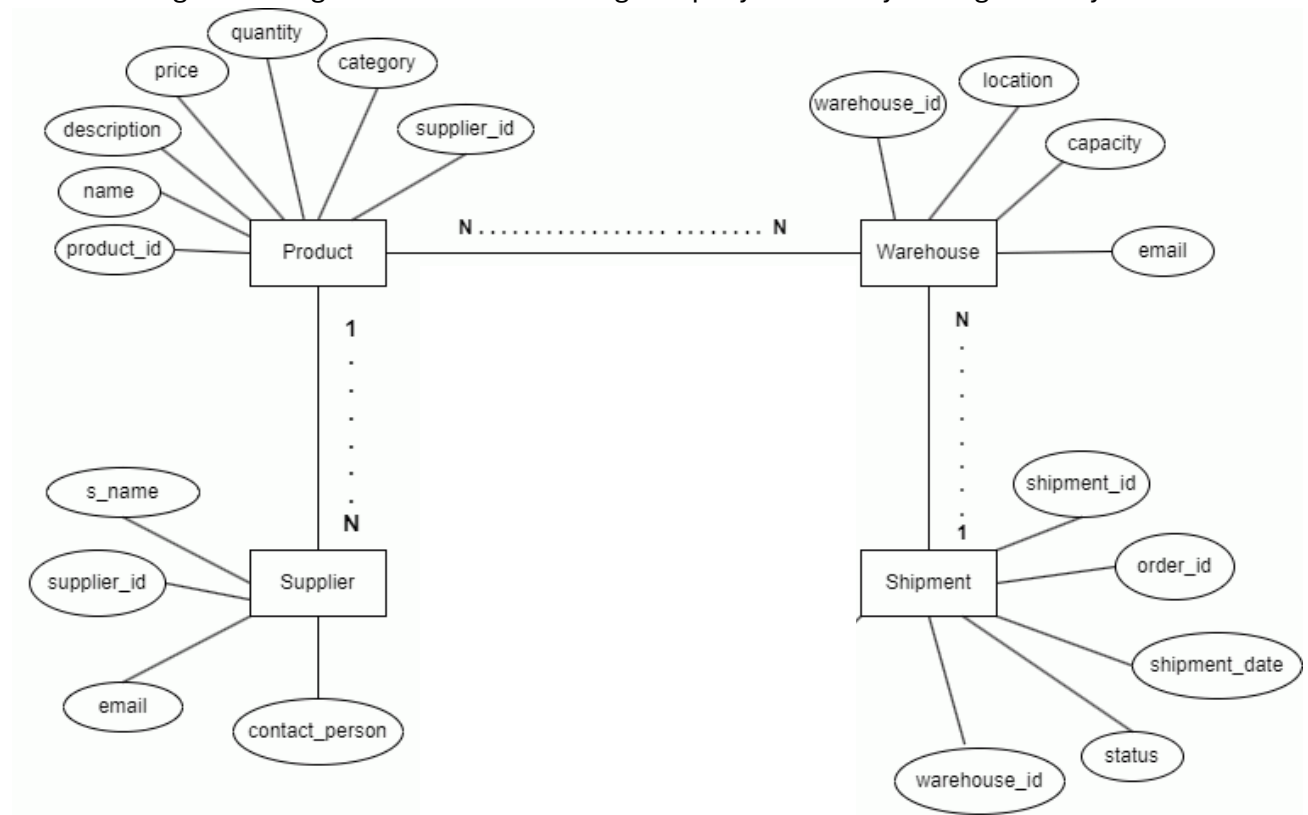
3. Attributes:

- Customer: CustomerID (PK), Name, Email, Address
- Product: ProductID (PK), Name, Price
- Order: OrderID (PK), CustomerID (FK), OrderDate, TotalAmount
- Supplier: SupplierID (PK), Name, ContactInfo



Q2. Create a conceptual ER diagram for a manufacturing company's inventory management system, including entities like products, suppliers, warehouses, and shipments.

Ans: Creating an ER diagram for a manufacturing company's inventory management system



1. Entities: 2. Attributes:

- Products -Products: productid(PK), price,name,description,quantity,category,supplierid(FK)
- Shipments -Shipments: shipmentid(PK),warehouseid(FK),status,shipment_date
- Warehouses -Warehouses: warehouseid(PK),location,capacity,email
- Suppliers -Suppliers: supplierid(PK),contact_person,name,s_email

Q3. Given a scenario involving a university's student registration system, design an ER diagram illustrating the entities, attributes, and relationships involved

Ans: ER for university's student registration system

1.Entities:

2. Attributes

-Student

-Student: studentid(PK),name,phoneNo.,Couseid(FK),

-Registrar

-Registrar: register(PK), studentid(FK), CourseName

-Advisor

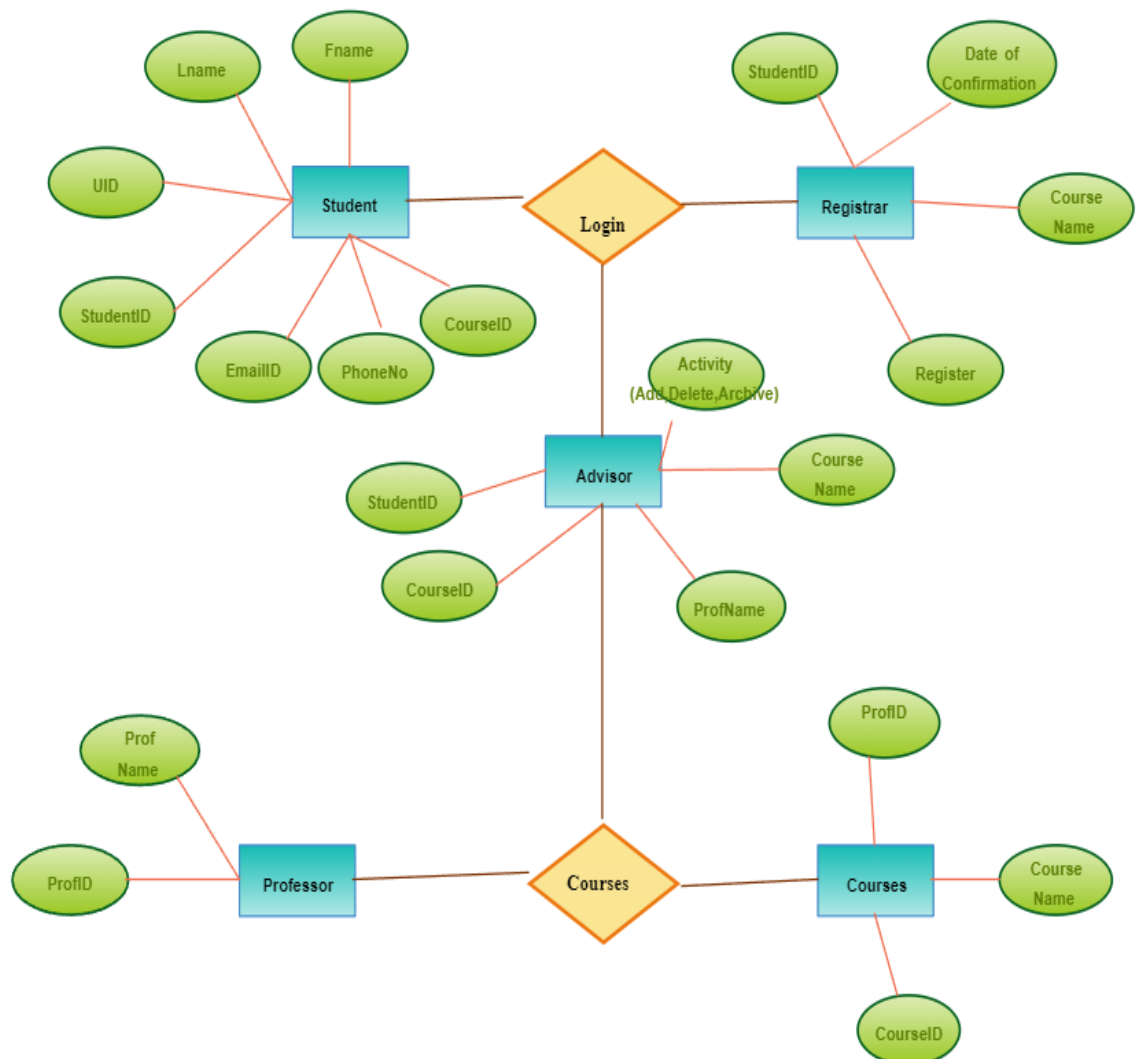
-Advisor: studentid(FK), CourseName, ProfName, Courseid

-Course

-Course: Courseid(PK), CourseName, ProfID(FK)

-Professors

-Professors: ProdID(PK), ProfName



Q4. Create an ER diagram for a library management system, including entities such as books, authors, borrowers, and transactions

Ans: ER diagram for a library management system

1.Entities:

-Books

-Authors

-Transactions

-Borrowers

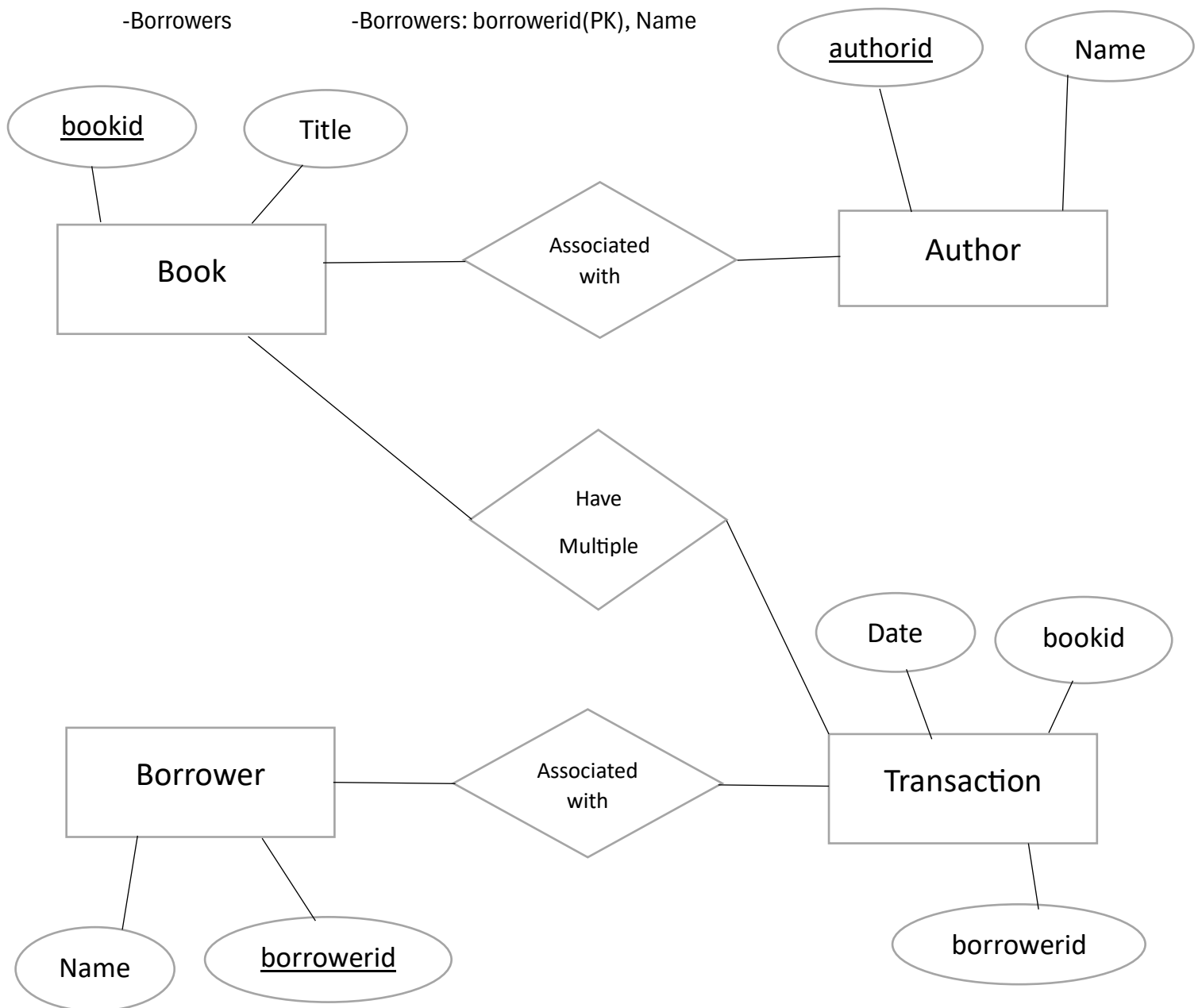
2. Attributes:

-Books: bookid(PK), title

-Authors: authorid(PK), Name

-Transactions: bookid(FK), borrowerid(FK), date

-Borrowers: borrowerid(PK), Name



Q5. Develop an ER diagram for a social media platform, considering entities like users, posts, comments, and likes

Ans: ER diagram for a social media platform

