

1. Identify Entities and Attributes

Here are the main entities and example attributes:

- **Books**

- BookID (Primary Key)
- Title
- Author
- Genre
- Price
- SupplierID (Foreign Key)

- **Suppliers**

- SupplierID (Primary Key)
- SupplierName
- ContactInfo

- **Customers**

- CustomerID (Primary Key)
- CustomerName
- Email
- PhoneNumber

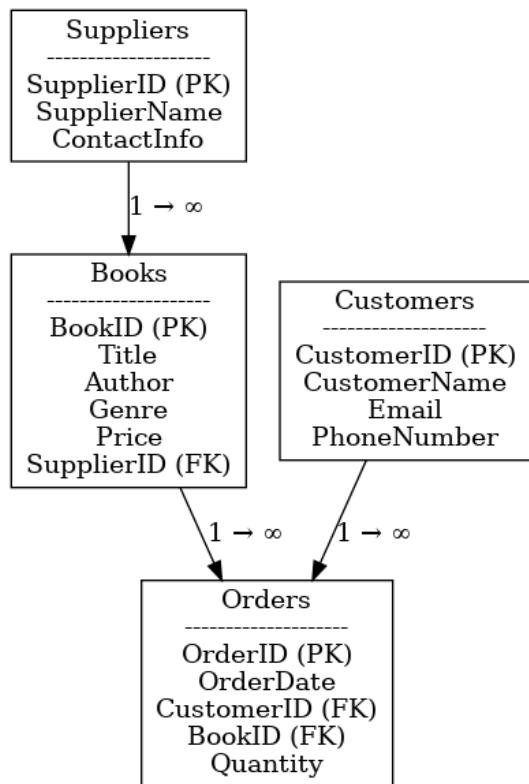
- **Orders**

- OrderID (Primary Key)
- OrderDate
- CustomerID (Foreign Key)
- BookID (Foreign Key)
- Quantity

2. Define Relationships

- **Suppliers → Books**
 - One supplier provides many books.
 - Relationship: **1 Supplier to Many Books.**
- **Customers → Orders**
 - One customer can place many orders.
 - Relationship: **1 Customer to Many Orders.**
- **Books → Orders**
 - One book can appear in many orders.
 - Relationship: **1 Book to Many Orders.**

3. ERD Diagram



4. Explanation

- **Primary Key (PK):** A unique identifier for each record (like a student ID at school).
- **Foreign Key (FK):** A link to another table's primary key (like saying "this order belongs to CustomerID = 5").
- **1 → Many Relationship:** One record in the first table can link to many records in the second table. Example: One supplier can provide many different books.