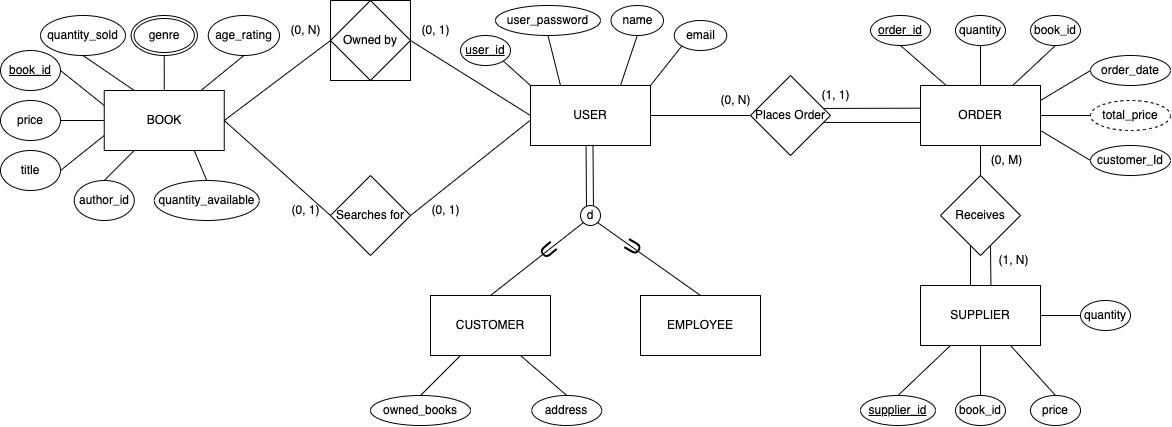
Task A:



Task B:

| Relation | Primary/Foreign Keys | Attributes |
| --- | --- | --- |
| User | Primary Key:  user\_id - int (10)   * Identifying register for each user (each user type would have a specific starting sequence to differentiate between users) | user\_password - varchar (20)   * Password user uses to login (along with email address)   name - varchar (30)   * Full name of the user   email - varchar (50)   * Email address user uses to login (along with user\_password)   Subclasses:  *Customer*   * owned\_books - Null String List   + List of name of books that customer has previously placed an order for * address - varchar (100)   + Address of customer used to deliver placed orders   *Employee* |
| Order | Primary Key:  order\_id - int (10)   * Identifying register for each order   Foreign Key:  customer\_id - int (10)   * Identifying register for each customer   book\_id - int (10)   * Identifying register for each book | quantity - int (5)   * Number of books placed in order   total\_price - double (10)   * Total sum of price of books   order\_date - date(MM-DD-YYYY)   * Date of which the order was placed |
| Supplier | Primary Key:  supplier\_id - int (10)   * Identifying register for each supplier   Foreign Key:  book\_id - int (10)   * Identifying register for each book | price - double (10)   * The price tag of each book   quantity - int (5)   * Number book(s) bought from the supplier |
| Book | Primary Key:  book\_id - int (10)   * Identifying register for each book | Price - double (4)   * Cost of each book   age\_rating - int (2)   * The appropriate age range for the intended audience of the book   genre - varchar (20)   * Categorizes books to assist users as they search   quantity\_available - int (5)   * Tracks the number of copies available for each book   quantity \_sold - int (5)   * Records the total number of copies each book sold   title - varchar (100)   * Allows users to search for the name of a book   author\_id - int (10)   * Links each book to its designated author   book\_id - int (10)   * Identifies each book |
| Owned\_By | Foreign Keys: book\_id - int (10)   * Identifying register for each book   user\_id - int (10)   * Identifying register for each user (each user type would have a specific starting sequence to differentiate between users) |  |

Relational Mapping:  
