**Entities and their Attributes –**

* **Book Entity :**It has authno, isbn number, title, edition, category, price. ISBN is the Primary Key for Book Entity.
* **Reader Entity :**It has UserId, Email, address, phone no, name. Name is composite attribute of firstname and lastname. Phone no is multi valued attribute. UserId is the Primary Key for Readers entity.
* **Publisher Entity :**It has PublisherId, Year of publication, name. PublisherID is the Primary Key.
* **Authentication System Entity :**It has LoginId and password with LoginID as Primary Key.
* **Reports Entity :**It has UserId, Reg\_no, Book\_no, Issue/Return date. Reg\_no is the Primary Key of reports entity.
* **Staff Entity :**It has name and staff\_id with staff\_id as Primary Key.
* **Reserve/Return Relationship Set :**It has three attributes: Reserve date, Due date, Return date.

[**Relationships**](https://www.geeksforgeeks.org/attributes-to-relationships-in-er-model/)**between Entities –**

* A reader can reserve N books but one book can be reserved by only one reader. The relationship 1:N.
* A publisher can publish many books but a book is published by only one publisher. The relationship 1:N.
* Staff keeps track of readers. The relationship is M:N.
* Staff maintains multiple reports. The relationship 1:N.
* Staff maintains multiple Books. The relationship 1:N.
* Authentication system provides login to multiple staffs. The relation is 1:N.