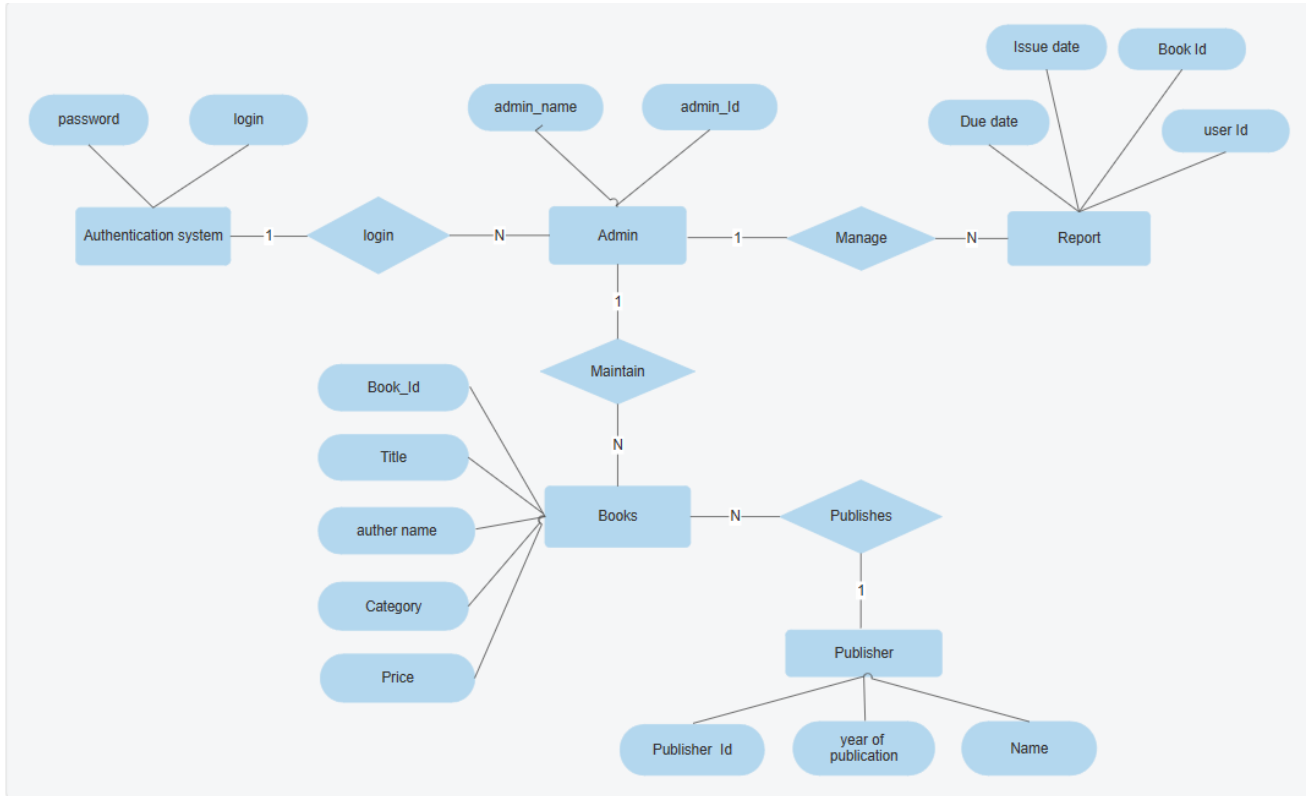# ER Diagram for Library Management System

- **Book Entity :** It has authno, isbn number, title, edition, category, price. ISBN is the Primary Key for Book 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 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 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.