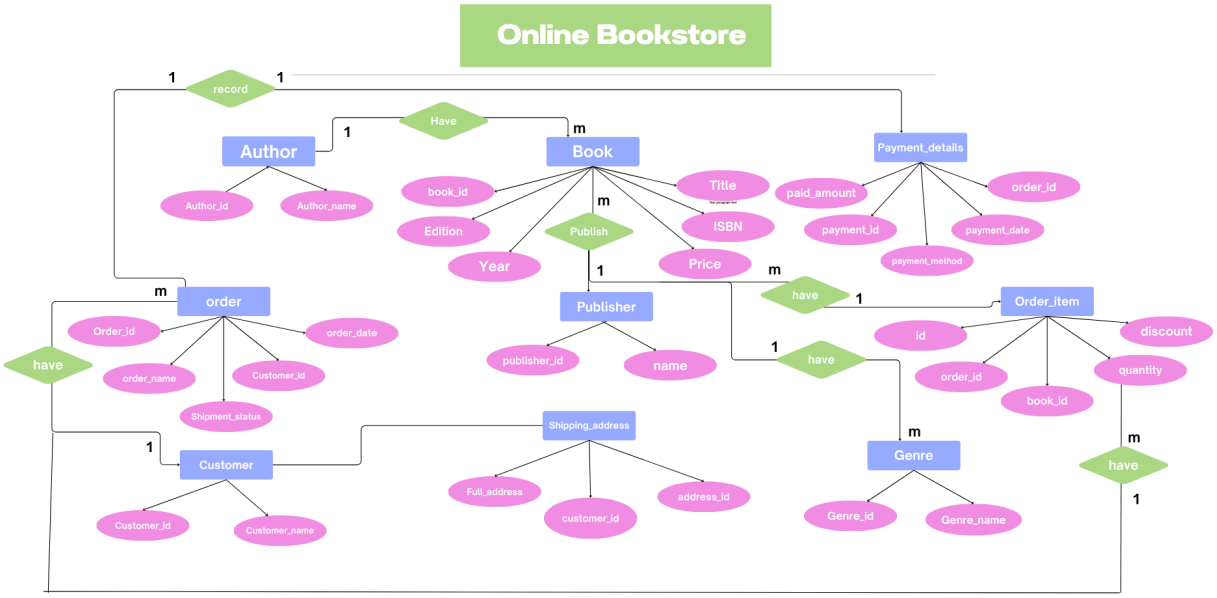
Project 3:Online Bookstore

Design an Entity-Relationship schema for an online book publishing and sales platform. The database should contain information about books with title, ISBN, edition, publication year, publisher, genres, and price. Authors have ID, name, biography, and are associated with multiple books.
Customers have customer ID, name, purchase history, shipping addresses, and wishlist items. Orders have order number, order date, customer placing the order, list of books ordered with quantity and per item discounts, payment details, and shipment status.

Publishers have names, contact details, and the books they publish. Books can be written by multiple authors and can belong to multiple genres. Customers can place multiple orders, have multiple shipping addresses, and maintain a wishlist of books.
Each edition of a book is published by exactly one publisher, and books can have multiple editions sold in different years. Orders can contain multiple books with different quantities and item-specific discounts. Assume scenarios such as co-authored books, special editions, and pre-order capabilities.



SQL TABLE CREATION STATEMENTS

```
-- Customer Table
CREATE TABLE Customer (
    Customer_id INT PRIMARY KEY,
    Customer_name VARCHAR(100)
```

```
);

-- Shipping Address Table
CREATE TABLE Shipping_address (
    address_id INT PRIMARY KEY,
    customer_id INT,
    Full_address TEXT,
    FOREIGN KEY (customer_id) REFERENCES Customer(Customer_id)
);

-- Author Table
CREATE TABLE Author (
    Author_id INT PRIMARY KEY,
    Author_name VARCHAR(100)
);

-- Publisher Table
CREATE TABLE Publisher (
    publisher_id INT PRIMARY KEY,
    name VARCHAR(100)
);

-- Book Table
CREATE TABLE Book (
    book_id INT PRIMARY KEY,
    Title VARCHAR(200),
    Edition VARCHAR(50),
    Year INT,
    ISBN VARCHAR(20),
    Price DECIMAL(10,2),
    publisher_id INT,
    FOREIGN KEY (publisher_id) REFERENCES Publisher(publisher_id)
);
```

```sql
-- Genre Table
CREATE TABLE Genre (
    Genre_id INT PRIMARY KEY,
    Genre_name VARCHAR(50)
);
-- Order Table
CREATE TABLE `Order` (
    Order_id INT PRIMARY KEY,
    order_name VARCHAR(100),
    order_date DATE,
    Customer_id INT,
    Shipment_status VARCHAR(50),
    FOREIGN KEY (Customer_id) REFERENCES Customer(Customer_id)
);

-- Order_Item Table
CREATE TABLE Order_item (
    id INT PRIMARY KEY,
    order_id INT,
    book_id INT,
    quantity INT,
    discount DECIMAL(5,2),
    FOREIGN KEY (order_id) REFERENCES `Order`(Order_id),
    FOREIGN KEY (book_id) REFERENCES Book(book_id)
);

-- Payment Details Table
CREATE TABLE Payment_details (
    payment_id INT PRIMARY KEY,
    order_id INT,
    paid_amount DECIMAL(10,2),
    payment_date DATE,
    payment_method VARCHAR(50),
    FOREIGN KEY (order_id) REFERENCES `Order`(Order_id)
```

```
);
/* ========== Insert the values ========== */
INSERT INTO Customer (Customer_id, Customer_name) VALUES
(1, 'Aishwarya R'),
(2, 'Rithika V'),
(3, 'Narashima P');

INSERT INTO Shipping_address (address_id, customer_id, Full_address)
VALUES
(101, 1, '123 Park Street, Hyderabad'),
(102, 2, '45 MG Road, Bangalore'),
(103, 3, '8-2-293 Jubilee Hills, Hyderabad');

INSERT INTO Author (Author_id, Author_name) VALUES
(1, 'Chetan Bhagat'),
(2, 'J.K. Rowling'),
(3, 'George R.R. Martin');

INSERT INTO Publisher (publisher_id, name) VALUES
(1, 'Penguin Random House'),
(2, 'Bloomsbury'),
(3, 'HarperCollins');

INSERT INTO Book (book_id, Title, Edition, Year, ISBN, Price, publisher_id)
VALUES
(1001, '2 States', '1st', 2009, '9788129135545', 299.00, 1),
(1002, 'Harry Potter and the Sorcerer''s Stone', '2nd', 1997, '9780747532699',
499.00, 2),
(1003, 'A Game of Thrones', '1st', 1996, '9780553103540', 699.00, 3);

INSERT INTO Genre (Genre_id, Genre_name) VALUES
(10, 'Romance'),
(11, 'Fantasy'),
(12, 'Adventure');

INSERT INTO `Order` (Order_id, order_name, order_date, Customer_id,
Shipment_status) VALUES
```

(5001, 'Order_5001', '2025-06-12', 1, 'Shipped'),
(5002, 'Order_5002', '2025-06-10', 2, 'Processing'),
(5003, 'Order_5003', '2025-06-08', 3, 'Delivered');

INSERT INTO Order_item (id, order_id, book_id, quantity, discount) VALUES
(1, 5001, 1001, 2, 10.00),
(2, 5001, 1002, 1, 0.00),
(3, 5002, 1003, 1, 5.00),
(4, 5003, 1002, 2, 15.00);

INSERT INTO Payment_details (payment_id, order_id, paid_amount, payment_date, payment_method) VALUES
(9001, 5001, 897.00, '2025-06-12', 'Credit Card'),
(9002, 5002, 664.00, '2025-06-10', 'UPI'),
(9003, 5003, 848.00, '2025-06-08', 'Net Banking');