

- **Project Topic:**

Online Bookstore Database Management System

- **Project Scope:**

Design and implement a SQL database for an online bookstore. The database should handle various aspects of book inventory, customer orders, and administrative functions.

- **Steps to Implement the Project:**

- 1. Database Design (DDL - Data Definition Language):**

- Step 1: Identify and define the entities (tables) needed for the bookstore database. Examples include:

- **Books** (ISBN, title, author, publisher, genre, price, etc.)
- **Customers** (customer_id, name, address, email, etc.)
- **Orders** (order_id, customer_id, order_date, status, total_amount, etc.)
- **Order Details** (order_id, ISBN, quantity, price)
- **Employees** (employee_id, name, position, etc.)
- **Categories, Publishers, Reviews, etc.**

I. Books

- **ISBN** (Primary Key): Unique identifier for each book.
- **title**: Title of the book.
- **author**: Author of the book.
- **publisher**: Publisher of the book.
- **genre**: Genre of the book.
- **price**: Price of the book.
- **publication_date**: Date of publication.
- **description**: Description of the book.
- **stock**: Number of copies available.

II. Customers

- **customer_id** (Primary Key): Unique identifier for each customer.
- **name**: Name of the customer.
- **address**: Address of the customer.

- **email:** Email address of the customer.
- **phone:** Phone number of the customer.
- **registration_date:** Date when the customer registered.

III. Orders

- **order_id** (Primary Key): Unique identifier for each order.
- **customer_id** (Foreign Key): Reference to the customer who placed the order.
- **order_date:** Date when the order was placed.
- **status:** Status of the order (e.g., pending, shipped, delivered).
- **total_amount:** Total amount for the order.

IV. Order Details

- **order_id** (Foreign Key): Reference to the order.
- **ISBN** (Foreign Key): Reference to the book.
- **quantity:** Quantity of the book ordered.
- **price:** Price of the book at the time of order.

V. Employees

- **employee_id** (Primary Key): Unique identifier for each employee.
- **name:** Name of the employee.
- **position:** Position or job title of the employee.
- **hire_date:** Date when the employee was hired.
- **salary:** Salary of the employee.

VI. Categories

- **category_id** (Primary Key): Unique identifier for each category.
- **name:** Name of the category.
- **description:** Description of the category.

VII. Publishers

- **publisher_id** (Primary Key): Unique identifier for each publisher.
- **name:** Name of the publisher.
- **address:** Address of the publisher.
- **phone:** Phone number of the publisher.
- **email:** Email address of the publisher.

VIII. Reviews

- **review_id** (Primary Key): Unique identifier for each review.
- **ISBN** (Foreign Key): Reference to the book.

- **customer_id** (Foreign Key): Reference to the customer.
- **rating**: Rating given by the customer (e.g., 1 to 5).
- **comment**: Comment or review text.
- **review_date**: Date when the review was submitted.

a) Queries:

1) CREATING DATABASE:

```
create database Online_Bookstore1;
```

2) CREATING TABLES:

/*Books Table*/

```
CREATE TABLE Books (
ISBN VARCHAR (100) PRIMARY KEY,
Title VARCHAR (255) NOT NULL,
Author VARCHAR (255) NOT NULL,
Publisher VARCHAR (255),
Genre VARCHAR (100),
Price DECIMAL (10, 2));
```

/*Customers Table*/

```
CREATE TABLE Customers (
Customer_ID INT PRIMARY KEY AUTO_INCREMENT,
Name VARCHAR (255) NOT NULL,
Address VARCHAR (255),
Email VARCHAR (255) UNIQUE NOT NULL);
```

/*Orders Table*/

```
CREATE TABLE Orders (
Order_ID INT PRIMARY KEY AUTO_INCREMENT,
Customer_ID INT,
Order_Date DATE NOT NULL,
Status VARCHAR (50),
Total_Amount DECIMAL (10, 2),
FOREIGN KEY (Customer_ID) REFERENCES Customers (Customer_ID));
```

/*Order Details Table*/

```
CREATE TABLE Order_Details (  
    Order_ID INT,  
    ISBN VARCHAR (130),  
    Quantity INT NOT NULL,  
    Price DECIMAL (10, 2) NOT NULL,  
    PRIMARY KEY (Order_ID, ISBN),  
    FOREIGN KEY (Order_ID) REFERENCES Orders (Order_ID),  
    FOREIGN KEY (ISBN) REFERENCES Books (ISBN));
```

/*Employees Table*/

```
CREATE TABLE Employees (  
    Employee_ID INT PRIMARY KEY AUTO_INCREMENT,  
    Name VARCHAR (255) NOT NULL,  
    Position VARCHAR (100));
```

/*Categories Table*/

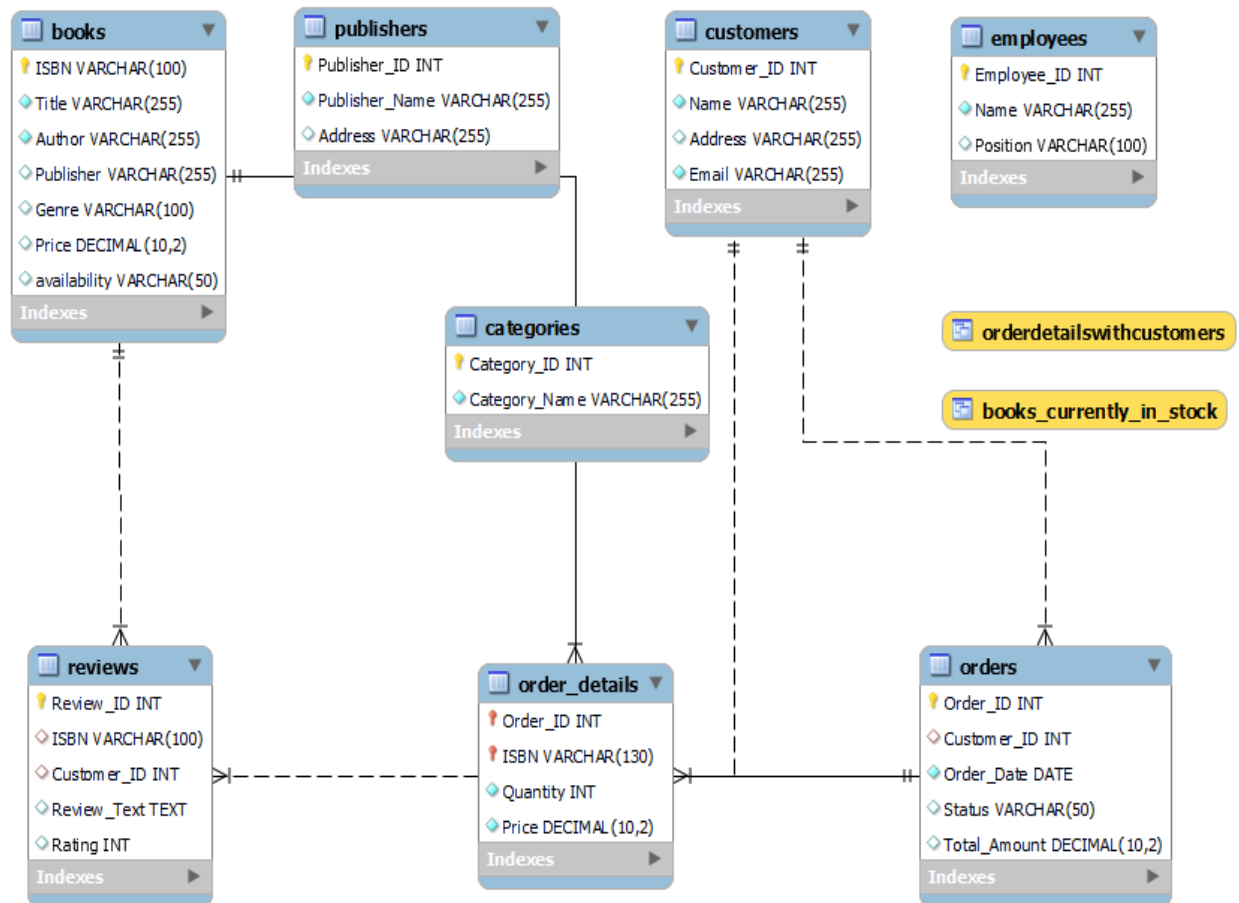
```
CREATE TABLE Categories (  
    Category_ID INT PRIMARY KEY AUTO_INCREMENT,  
    Category_Name VARCHAR (255) NOT NULL);
```

/*Publishers Table*/

```
CREATE TABLE Publishers (  
    Publisher_ID INT PRIMARY KEY AUTO_INCREMENT,  
    Publisher_Name VARCHAR (255) NOT NULL,  
    Address VARCHAR (255));
```

/*Reviews Table*/

```
CREATE TABLE Reviews (  
    Review_ID INT PRIMARY KEY AUTO_INCREMENT,  
    ISBN VARCHAR (100),  
    Customer_ID INT,  
    Review_Text TEXT,  
    Rating INT CHECK (Rating >= 1 AND Rating <= 5),  
    FOREIGN KEY (ISBN) REFERENCES Books (ISBN),  
    FOREIGN KEY (Customer_ID) REFERENCES Customers (Customer_ID));
```



3) INSERTING DATA INTO TABLES:

/*Insert data into Books*/

```
INSERT INTO Books (ISBN, Title, Author, Publisher, Genre, Price) VALUES
('978-3-16-148410-0', 'The Great Gatsby', 'F. Scott Fitzgerald', 'Scribner', 'Fiction', 10.99),
('978-0-14-044913-6', '1984', 'George Orwell', 'Penguin Classics', 'Dystopian', 9.99),
('978-0-452-28423-4', 'To Kill a Mockingbird', 'Harper Lee', 'J.B. Lippincott & Co.', 'Fiction',
7.99),
('978-0-7432-7356-5', 'Angels & Demons', 'Dan Brown', 'Simon & Schuster', 'Thriller', 15.99),
('978-0-670-81302-8', 'The Catcher in the Rye', 'J.D. Salinger', 'Little, Brown and Company',
'Fiction', 6.99),
('978-0-553-21311-7', 'The Hobbit', 'J.R.R. Tolkien', 'George Allen & Unwin', 'Fantasy', 8.99),
('978-0-345-39180-3', 'A Game of Thrones', 'George R.R. Martin', 'Bantam Books', 'Fantasy',
9.99),
('978-0-06-112008-4', 'Brave New World', 'Aldous Huxley', 'Harper Perennial', 'Dystopian',
10.99),
('978-0-7432-7358-9', 'The Da Vinci Code', 'Dan Brown', 'Doubleday', 'Mystery', 14.99),
('978-0-451-52386-8', 'The Handmaid's Tale', 'Margaret Atwood', 'Houghton Mifflin', 'Dystopian',
12.99);
```

/*Insert data into Customers*/

```
INSERT INTO Customers (Name, Address, Email) VALUES
('John Doe', '123 Main St, Anytown, USA', 'john.doe@example.com'),
('Jane Smith', '456 Elm St, Othertown, USA', 'jane.smith@example.com'),
('Alice Johnson', '789 Oak St, Sometown, USA', 'alice.johnson@example.com'),
('Bob Brown', '101 Pine St, Anycity, USA', 'bob.brown@example.com'),
('Charlie Davis', '202 Maple St, Yourtown, USA', 'charlie.davis@example.com'),
('Diana Prince', '303 Cedar St, Theircity, USA', 'diana.prince@example.com'),
('Eve White', '404 Birch St, Hiscity, USA', 'eve.white@example.com'),
('Frank Black', '505 Willow St, Heretown, USA', 'frank.black@example.com'),
('Grace Green', '606 Poplar St, Mytown, USA', 'grace.green@example.com'),
('Hank Blue', '707 Spruce St, Youtown, USA', 'hank.blue@example.com');
```

/*Insert data into Orders*/

```
INSERT INTO Orders (Customer_ID, Order_Date, Status, Total_Amount) VALUES
(1, '2024-07-01', 'Shipped', 31.97),
(2, '2024-07-02', 'Pending', 21.98),
(3, '2024-07-03', 'Delivered', 10.99),
(4, '2024-07-04', 'Cancelled', 9.99),
(5, '2024-07-05', 'Shipped', 19.98),
```

```
(6, '2024-07-06', 'Delivered', 6.99),  
(7, '2024-07-07', 'Pending', 8.99),  
(8, '2024-07-08', 'Shipped', 19.98),  
(9, '2024-07-09', 'Delivered', 10.99),  
(10, '2024-07-10', 'Pending', 14.99);
```

/*Insert data into Order_Details*/

```
INSERT INTO Order_Details (Order_ID, ISBN, Quantity, Price) VALUES  
(1, '978-3-16-148410-0', 1, 10.99),  
(1, '978-0-14-044913-6', 1, 9.99),  
(1, '978-0-452-28423-4', 1, 7.99),  
(2, '978-0-7432-7356-5', 1, 15.99),  
(2, '978-0-670-81302-8', 1, 6.99),  
(3, '978-0-553-21311-7', 1, 8.99),  
(4, '978-0-345-39180-3', 1, 9.99),  
(5, '978-0-06-112008-4', 1, 10.99),  
(5, '978-0-7432-7358-9', 1, 14.99),  
(6, '978-0-451-52386-8', 1, 12.99);
```

/*Insert data into Employees*/

```
INSERT INTO Employees (Name, Position) VALUES  
( 'Michael Scott', 'Manager'),  
( 'Dwight Schrute', 'Assistant Manager'),  
( 'Jim Halpert', 'Sales Representative'),  
( 'Pam Beesly', 'Receptionist'),  
( 'Stanley Hudson', 'Sales Representative'),  
( 'Phyllis Vance', 'Sales Representative'),  
( 'Ryan Howard', 'Temp'),  
( 'Kelly Kapoor', 'Customer Service Representative'),  
( 'Angela Martin', 'Accountant'),  
( 'Oscar Martinez', 'Accountant');
```

/*Insert data into Categories*/

```
INSERT INTO Categories (Category_Name) VALUES  
( 'Fiction'),  
( 'Non-Fiction'),  
( 'Science Fiction'),  
( 'Fantasy'),  
( 'Mystery'),  
( 'Thriller'),
```

('Romance'),
('Historical'),
('Young Adult'),
('Children');

/*Insert data into Publishers*/

```
INSERT INTO Publishers (Publisher_Name, Address) VALUES  
('Scribner', '123 Publisher St, New York, NY'),  
('Penguin Classics', '456 Publisher Ave, London, UK'),  
('J.B. Lippincott & Co.', '789 Publisher Blvd, Philadelphia, PA'),  
('Simon & Schuster', '101 Publisher Rd, New York, NY'),  
('Little, Brown and Company', '202 Publisher Ln, Boston, MA'),  
('George Allen & Unwin', '303 Publisher Dr, London, UK'),  
('Bantam Books', '404 Publisher Pl, New York, NY'),  
('Harper Perennial', '505 Publisher Ct, New York, NY'),  
('Doubleday', '606 Publisher Way, New York, NY'),  
('Houghton Mifflin', '707 Publisher St, Boston, MA');
```

/*Insert data into Reviews*/

```
INSERT INTO Reviews (ISBN, Customer_ID, Review_Text, Rating) VALUES  
('978-3-16-148410-0', 1, 'Amazing book!', 5),  
('978-0-14-044913-6', 2, 'A thought-provoking novel.', 4),  
('978-0-452-28423-4', 3, 'A timeless classic.', 5),  
('978-0-7432-7356-5', 4, 'A thrilling read.', 4),  
('978-0-670-81302-8', 5, 'A must-read.', 5),  
('978-0-553-21311-7', 6, 'A wonderful journey.', 4),  
('978-0-345-39180-3', 7, 'A gripping tale.', 5),  
('978-0-06-112008-4', 8, 'An intriguing story.', 4),  
('978-0-7432-7358-9', 9, 'A page-turner.', 5),  
('978-0-451-52386-8', 10, 'A chilling dystopia.', 4);
```


4). TABLE STRUCTURE:

Desc Books;

	Field	Type	Null	Key	Default	Extra
►	ISBN	varchar(100)	NO	PRI	NULL	
	Title	varchar(255)	NO		NULL	
	Author	varchar(255)	NO		NULL	
	Publisher	varchar(255)	YES		NULL	
	Genre	varchar(100)	YES		NULL	
	Price	decimal(10,2)	YES		NULL	

Desc Customers;

	Field	Type	Null	Key	Default	Extra
►	Customer_ID	int	NO	PRI	NULL	auto_increment
	Name	varchar(255)	NO		NULL	
	Address	varchar(255)	YES		NULL	
	Email	varchar(255)	NO	UNI	NULL	

Desc Orders;

	Field	Type	Null	Key	Default	Extra
►	Order_ID	int	NO	PRI	NULL	auto_increment
	Customer_ID	int	YES	MUL	NULL	
	Order_Date	date	NO		NULL	
	Status	varchar(50)	YES		NULL	
	Total_Amount	decimal(10,2)	YES		NULL	

Desc Order_Details;

	Field	Type	Null	Key	Default	Extra
►	Order_ID	int	NO	PRI	NULL	
	ISBN	varchar(130)	NO	PRI	NULL	
	Quantity	int	NO		NULL	
	Price	decimal(10,2)	NO		NULL	

Desc Employees;

	Field	Type	Null	Key	Default	Extra
►	Employee_ID	int	NO	PRI	NULL	auto_increment
	Name	varchar(255)	NO		NULL	
	Position	varchar(100)	YES		NULL	

Desc Categories;

	Field	Type	Null	Key	Default	Extra
►	Category_ID	int	NO	PRI	NULL	auto_increment
	Category_Name	varchar(255)	NO		NULL	

Desc Publishers;

	Field	Type	Null	Key	Default	Extra
►	Publisher_ID	int	NO	PRI	NULL	auto_increment
	Publisher_Name	varchar(255)	NO		NULL	
	Address	varchar(255)	YES		NULL	

Desc Reviews;

	Field	Type	Null	Key	Default	Extra
►	Review_ID	int	NO	PRI	NULL	auto_increment
	ISBN	varchar(100)	YES	MUL	NULL	
	Customer_ID	int	YES	MUL	NULL	
	Review_Text	text	YES		NULL	
	Rating	int	YES		NULL	

5). Table Content:

Select * from Books;

	ISBN	Title	Author	Publisher	Genre	Price
►	978-0-06-112008-4	Brave New World	Aldous Huxley	Harper Perennial	Dystopian	10.99
	978-0-14-044913-6	1984	George Orwell	Penguin Classics	Dystopian	9.99
	978-0-345-39180-3	A Game of Thrones	George R.R. Martin	Bantam Books	Fantasy	9.99
	978-0-451-52386-8	The Handmaid's Tale	Margaret Atwood	Houghton Mifflin	Dystopian	12.99
	978-0-452-28423-4	To Kill a Mockingbird	Harper Lee	J.B. Lippincott & Co.	Fiction	7.99
	978-0-553-21311-7	The Hobbit	J.R.R. Tolkien	George Allen & Unwin	Fantasy	8.99
	978-0-670-81302-8	The Catcher in the Rye	J.D. Salinger	Little, Brown and Company	Fiction	6.99
	978-0-7432-7356-5	Angels & Demons	Dan Brown	Simon & Schuster	Thriller	15.99
	978-0-7432-7358-9	The Da Vinci Code	Dan Brown	Doubleday	Mystery	14.99
	978-3-16-148410-0	The Great Gatsby	F. Scott Fitzgerald	Scribner	Fiction	10.99
⌵	NULL	NULL	NULL	NULL	NULL	NULL

Select * from Customers;

	Customer_ID	Name	Address	Email
▶	1	John Doe	123 Main St, Anytown, USA	john.doe@example.com
	2	Jane Smith	456 Elm St, Othertown, USA	jane.smith@example.com
	3	Alice Johnson	789 Oak St, Sometown, USA	alice.johnson@example.com
	4	Bob Brown	101 Pine St, Anycity, USA	bob.brown@example.com
	5	Charlie Davis	202 Maple St, Yourtown, USA	charlie.davis@example.com
	6	Diana Prince	303 Cedar St, Theircity, USA	diana.prince@example.com
	7	Eve White	404 Birch St, Hiscity, USA	eve.white@example.com
	8	Frank Black	505 Willow St, Heretown, USA	frank.black@example.com
	9	Grace Green	606 Poplar St, Mytown, USA	grace.green@example.com
	10	Hank Blue	707 Spruce St, Youtown, USA	hank.blue@example.com
▲	NULL	NULL	NULL	NULL

Select * from Orders;

	Order_ID	Customer_ID	Order_Date	Status	Total_Amount
▶	1	1	2024-07-01	Shipped	31.97
	2	2	2024-07-02	Pending	21.98
	3	3	2024-07-03	Delivered	10.99
	4	4	2024-07-04	Cancelled	9.99
	5	5	2024-07-05	Shipped	19.98
	6	6	2024-07-06	Delivered	6.99
	7	7	2024-07-07	Pending	8.99
	8	8	2024-07-08	Shipped	19.98
	9	9	2024-07-09	Delivered	10.99
	10	10	2024-07-10	Pending	14.99
▲	NULL	NULL	NULL	NULL	NULL

Select * from Order_Details;

	Order_ID	ISBN	Quantity	Price
▶	1	978-0-14-044913-6	1	9.99
	1	978-0-452-28423-4	1	7.99
	1	978-3-16-148410-0	1	10.99
	2	978-0-670-81302-8	1	6.99
	2	978-0-7432-7356-5	1	15.99
	3	978-0-553-21311-7	1	8.99
	4	978-0-345-39180-3	1	9.99
	5	978-0-06-112008-4	1	10.99
	5	978-0-7432-7358-9	1	14.99
	6	978-0-451-52386-8	1	12.99
▲	NULL	NULL	NULL	NULL

Select * from Employees;

	Employee_ID	Name	Position
▶	1	Michael Scott	Manager
	2	Dwight Schrute	Assistant Manager
	3	Jim Halpert	Sales Representative
	4	Pam Beesly	Receptionist
	5	Stanley Hudson	Sales Representative
	6	Phyllis Vance	Sales Representative
	7	Ryan Howard	Temp
	8	Kelly Kapoor	Customer Service Representative
	9	Angela Martin	Accountant
	10	Oscar Martinez	Accountant
▲	NULL	NULL	NULL

Select * from Categories;

	Category_ID	Category_Name
▶	1	Fiction
	2	Non-Fiction
	3	Science Fiction
	4	Fantasy
	5	Mystery
	6	Thriller
	7	Romance
	8	Historical
	9	Young Adult
	10	Children
▲	NULL	NULL

Select * from Publishers;

	Publisher_ID	Publisher_Name	Address
▶	1	Scribner	123 Publisher St, New York, NY
	2	Penguin Classics	456 Publisher Ave, London, UK
	3	J.B. Lippincott & Co.	789 Publisher Blvd, Philadelphia, PA
	4	Simon & Schuster	101 Publisher Rd, New York, NY
	5	Little, Brown and Company	202 Publisher Ln, Boston, MA
	6	George Allen & Unwin	303 Publisher Dr, London, UK
	7	Bantam Books	404 Publisher Pl, New York, NY
	8	Harper Perennial	505 Publisher Ct, New York, NY
	9	Doubleday	606 Publisher Way, New York, NY
	10	Houghton Mifflin	707 Publisher St, Boston, MA
▲	NULL	NULL	NULL

Select * from Reviews;

	Review_ID	ISBN	Customer_ID	Review_Text	Rating
▶	1	978-3-16-148410-0	1	Amazing book!	5
	2	978-0-14-044913-6	2	A thought-provoking novel.	4
	3	978-0-452-28423-4	3	A timeless classic.	5
	4	978-0-7432-7356-5	4	A thrilling read.	4
	5	978-0-670-81302-8	5	A must-read.	5
	6	978-0-553-21311-7	6	A wonderful journey.	4
	7	978-0-345-39180-3	7	A gripping tale.	5
	8	978-0-06-112008-4	8	An intriguing story.	4
	9	978-0-7432-7358-9	9	A page-turner.	5
	10	978-0-451-52386-8	10	A chilling dystopia.	4
⬅	NULL	NULL	NULL	NULL	NULL

6). Data Queries (DQL):

A) List of books by a specific author.

SELECT * FROM Books WHERE Author = 'George Orwell';

	ISBN	Title	Author	Publisher	Genre	Price
▶	978-0-14-044913-6	1984	George Orwell	Penguin Classics	Dystopian	9.99
⬅	NULL	NULL	NULL	NULL	NULL	NULL

B) Total sales by month.

SELECT DATE_FORMAT (Order_Date, '%Y-%m') AS Order_Month, SUM
(Total_Amount) AS Total_Sales
FROM Orders GROUP BY DATE_FORMAT (Order_Date, '%Y-%m') ORDER BY
Order_Month;

	Order_Month	Total_Sales
▶	2024-07	156.85

C). Customers who purchased more than a certain amount.

SELECT CUSTOMERS.NAME, ORDERS.CUSTOMER_ID,
ORDERS.TOTAL_AMOUNT FROM CUSTOMERS
JOIN ORDERS ON CUSTOMERS.CUSTOMER_ID=ORDERS.CUSTOMER_ID
WHERE TOTAL_AMOUNT> 10;

	NAME	CUSTOMER_ID	TOTAL_AMOUNT
▶	John Doe	1	31.97
	Jane Smith	2	21.98
	Alice Johnson	3	10.99
	Charlie Davis	5	19.98
	Frank Black	8	19.98
	Grace Green	9	10.99
	Hank Blue	10	14.99

D). Best-selling books.

```
SELECT BOOKS.TITLE, BOOKS.AUTHOR, REVIEWS.RATING FROM
BOOKS JOIN REVIEWS ON BOOKS.ISBN = REVIEWS.ISBN WHERE
REVIEWS.RATING=5;
```

	TITLE	AUTHOR	RATING
▶	The Great Gatsby	F. Scott Fitzgerald	5
	To Kill a Mockingbird	Harper Lee	5
	The Catcher in the Rye	J.D. Salinger	5
	A Game of Thrones	George R.R. Martin	5
	The Da Vinci Code	Dan Brown	5

E). Pending orders

```
SELECT * FROM Orders WHERE Status = 'Pending';
```

	Order_ID	Customer_ID	Order_Date	Status	Total_Amount
▶	2	2	2024-07-02	Pending	21.98
	7	7	2024-07-07	Pending	8.99
	10	10	2024-07-10	Pending	14.99
*	NULL	NULL	NULL	NULL	NULL

7). Advanced Queries and Subqueries:

A). Customers who have placed orders exceeding a certain total amount.

```
SELECT * FROM Customers WHERE Customer_ID IN (SELECT Customer_ID FROM Orders
GROUP BY Customer_ID HAVING SUM(Total_Amount) > 15);
```

	Customer_ID	Name	Address	Email
▶	1	John Doe	123 Main St, Anytown, USA	john.doe@example.com
	2	Jane Smith	456 Elm St, Othertown, USA	jane.smith@example.com
	5	Charlie Davis	202 Maple St, Yourtown, USA	charlie.davis@example.com
	8	Frank Black	505 Willow St, Heretown, USA	frank.black@example.com
*	NULL	NULL	NULL	NULL

B). Identify books that have never been ordered.

```
SELECT * FROM BOOKS WHERE ISBN NOT IN(SELECT ISBN FROM ORDER_DETAILS);
```

8). Using Joins:

A). Retrieve order details along with customer information

```
SELECT O.Order_ID, O.Order_Date, O.Total_Amount, OD.ISBN, OD.Quantity, OD.Price, C.Customer_ID, C.Name, C.Email FROM Orders O INNER JOIN Order_Details OD ON Order_id = OD.Order_ID INNER JOIN Customers C ON O.Customer_ID = C.Customer_ID;
```

	Order_ID	Order_Date	Total_Amount	ISBN	Quantity	Price	Customer_ID	Name	Email
►	1	2024-07-01	31.97	978-0-14-044913-6	1	9.99	1	John Doe	john.doe@example.com
	1	2024-07-01	31.97	978-0-452-28423-4	1	7.99	1	John Doe	john.doe@example.com
	1	2024-07-01	31.97	978-3-16-148410-0	1	10.99	1	John Doe	john.doe@example.com
	2	2024-07-02	21.98	978-0-670-81302-8	1	6.99	2	Jane Smith	jane.smith@example.com
	2	2024-07-02	21.98	978-0-7432-7356-5	1	15.99	2	Jane Smith	jane.smith@example.com
	3	2024-07-03	10.99	978-0-553-21311-7	1	8.99	3	Alice Johnson	alice.johnson@example.com
	4	2024-07-04	9.99	978-0-345-39180-3	1	9.99	4	Bob Brown	bob.brown@example.com
	5	2024-07-05	19.98	978-0-06-112008-4	1	10.99	5	Charlie Davis	charlie.davis@example.com
	5	2024-07-05	19.98	978-0-7432-7358-9	1	14.99	5	Charlie Davis	charlie.davis@example.com
	6	2024-07-06	6.99	978-0-451-52386-8	1	12.99	6	Diana Prince	diana.prince@example.com

B). List books along with their publishers:

```
SELECT B.ISBN, B.Title, B.Author, B.Genre, B.Price, P.Publisher_Name, P.Address FROM Books B INNER JOIN Publishers P ON B.Publisher = P.Publisher_Name;
```

	ISBN	Title	Author	Genre	Price	Publisher_Name	Address
►	978-3-16-148410-0	The Great Gatsby	F. Scott Fitzgerald	Fiction	10.99	Scribner	123 Publisher St, New York, NY
	978-0-14-044913-6	1984	George Orwell	Dystopian	9.99	Penguin Classics	456 Publisher Ave, London, UK
	978-0-452-28423-4	To Kill a Mockingbird	Harper Lee	Fiction	7.99	J.B. Lippincott & Co.	789 Publisher Blvd, Philadelphia, PA
	978-0-7432-7356-5	Angels & Demons	Dan Brown	Thriller	15.99	Simon & Schuster	101 Publisher Rd, New York, NY
	978-0-670-81302-8	The Catcher in the Rye	J.D. Salinger	Fiction	6.99	Little, Brown and Company	202 Publisher Ln, Boston, MA
	978-0-553-21311-7	The Hobbit	J.R.R. Tolkien	Fantasy	8.99	George Allen & Unwin	303 Publisher Dr, London, UK
	978-0-345-39180-3	A Game of Thrones	George R.R. Martin	Fantasy	9.99	Bantam Books	404 Publisher Pl, New York, NY
	978-0-06-112008-4	Brave New World	Aldous Huxley	Dystopian	10.99	Harper Perennial	505 Publisher Ct, New York, NY
	978-0-7432-7358-9	The Da Vinci Code	Dan Brown	Mystery	14.99	Doubleday	606 Publisher Way, New York, NY
	978-0-451-52386-8	The Handmaid's Tale	Margaret Atwood	Dystopian	12.99	Houghton Mifflin	707 Publisher St, Boston, MA

9). Creating Views:

A). Create a view to show all orders along with customer details.

```
CREATE VIEW OrderDetailsWithCustomers AS SELECT O.Order_ID,O.Customer_ID,C.Name AS
Customer_Name,C.Address AS Customer_Address,
C.Email AS Customer_Email,O.Order_Date,O.Status,O.Total_Amount FROM Orders O
JOIN Customers C ON O.Customer_ID = C.Customer_ID;
```

```
select * from orderdetailswithcustomers;
```

	Order_ID	Customer_ID	Customer_Name	Customer_Address	Customer_Email	Order_Date	Status	Total_Amount
	1	1	John Doe	123 Main St, Anytown, USA	john.doe@example.com	2024-07-01	Shipped	31.97
	2	2	Jane Smith	456 Elm St, Othertown, USA	jane.smith@example.com	2024-07-02	Pending	21.98
	3	3	Alice Johnson	789 Oak St, Sometown, USA	alice.johnson@example.com	2024-07-03	Delivered	10.99
	4	4	Bob Brown	101 Pine St, Anycity, USA	bob.brown@example.com	2024-07-04	Cancelled	9.99
	5	5	Charlie Davis	202 Maple St, Yourtown, USA	charlie.davis@example.com	2024-07-05	Shipped	19.98
	6	6	Diana Prince	303 Cedar St, Theircity, USA	diana.prince@example.com	2024-07-06	Delivered	6.99
	7	7	Eve White	404 Birch St, Hiscity, USA	eve.white@example.com	2024-07-07	Pending	8.99
	8	8	Frank Black	505 Willow St, Heretown, USA	frank.black@example.com	2024-07-08	Shipped	19.98
	9	9	Grace Green	606 Poplar St, Mytown, USA	grace.green@example.com	2024-07-09	Delivered	10.99
	10	10	Hank Blue	707 Spruce St, Youtown, USA	hank.blue@example.com	2024-07-10	Pending	14.99

B). Create a view for books that are currently in stock

```
CREATE VIEW Books_Currently_in_Stock AS
select * from Books where availability = "In Stock";
```

```
select * from Books_Currently_in_Stock;
```

[illegible]

