

# BOOKSTORE DATABASE

## TABLES

|                     |
|---------------------|
| Tables_in_bookstore |
| Categories          |
| Customers           |
| OrderDetails        |
| Orders              |
| Products            |

### Notes:

- Field is the name of the DB field
- If Type is varchar, value must be in quotes
- If Null says "NO", that field must have a value
- If "auto\_increment", value is assigned for you

## Customers

| Field       | Type        | Null | Key | Default | Extra          |
|-------------|-------------|------|-----|---------|----------------|
| CustomerID  | int(11)     | NO   | PRI | NULL    | auto_increment |
| Email       | varchar(50) | NO   | UNI | NULL    |                |
| Passwd      | varchar(15) | NO   |     | NULL    |                |
| FirstName   | varchar(20) | NO   |     | NULL    |                |
| LastName    | varchar(25) | NO   |     | NULL    |                |
| Address1    | varchar(50) | NO   |     | NULL    |                |
| Address2    | varchar(50) | YES  |     | NULL    |                |
| ZipCode     | int(11)     | NO   |     | 0       |                |
| State       | varchar(2)  | NO   |     | NULL    |                |
| PhoneNumber | varchar(15) | YES  |     | NULL    |                |
| City        | varchar(50) | NO   |     | NULL    |                |

## Categories

| Field        | Type        | Null | Key | Default | Extra          |
|--------------|-------------|------|-----|---------|----------------|
| CategoryID   | int(11)     | NO   | PRI | NULL    | auto_increment |
| CategoryName | varchar(50) | NO   | UNI | NULL    |                |

## Products

| Field      | Type           | Null | Key | Default | Extra |
|------------|----------------|------|-----|---------|-------|
| ProductID  | varchar(10)    | NO   | PRI | NULL    |       |
| Title      | varchar(50)    | NO   |     | NULL    |       |
| Author1    | varchar(255)   | YES  |     | NULL    |       |
| Author2    | varchar(50)    | YES  |     | NULL    |       |
| Author3    | varchar(50)    | YES  |     | NULL    |       |
| Quantity   | int(11)        | YES  |     | 0       |       |
| Price      | decimal(19, 4) | NO   |     | 0.0000  |       |
| CategoryID | int(11)        | YES  |     | 0       |       |

## OrderDetails

| Field     | Type          | Null | Key | Default | Extra |
|-----------|---------------|------|-----|---------|-------|
| OrderID   | int(11)       | NO   | PRI | 0       |       |
| ProductID | varchar(10)   | NO   | PRI | NULL    |       |
| Quantity  | int(11)       | NO   |     | 0       |       |
| LineTotal | decimal(19,4) | YES  |     | 0.0000  |       |

## Orders

| Field        | Type     | Null | Key | Default | Extra          |
|--------------|----------|------|-----|---------|----------------|
| OrderID      | int(11)  | NO   | PRI | NULL    | auto_increment |
| CustomerID   | int(11)  | NO   |     | 0       |                |
| ShippingCost | double   | YES  |     | 0       |                |
| Tax          | double   | YES  |     | 0       |                |
| Total        | double   | YES  |     | 0       |                |
| OrderDate    | datetime | YES  |     | NULL    |                |

## SQL Code Necessary for Project

### Code to connect to the MySQL database

```
$connection;
```

```
// connecto to the bookstore DB
```

```
function db_connect()
```

```
{  
    $DB_NAME = "bookstore";  
    $DB_HOST = "localhost";  
    $DB_USER = "yourKUuserName";  
    $DB_PASS = "yourDBpassword";
```

```
    global $connection;
```

```
    $connection = mysql_connect($DB_HOST, $DB_USER, $DB_PASS)  
        or die("Cannot connect to $DB_HOST as $DB_USER: " . mysql_error());
```

```
    mysql_select_db($DB_NAME) or die ("Cannot open $DB_NAME: " . mysql_error());
```

```
    return $connection;
```

```
}
```

### Code to close the connection to the MySQL database

```
// close connection to bookstore DB
```

```
function db_close()
```

```
{  
    global $connection;  
    mysql_close($connection);  
}
```

SQL query to get a specific customer (user account) by E-mail Address only

```
SELECT Email FROM Customers  
WHERE Email = ' emailAddressEnteredByUser'
```

SQL query to get customer (user account) info based on Email address and Password

```
SELECT CustomerID, Email, Passwd, FirstName FROM Customers  
WHERE Email = ' customersEmailAddress'  
AND Passwd = ' customersPassword'
```

SQL query to add a new customer (user account)

```
INSERT INTO Customers  
(Email, Passwd, FirstName, LastName,  
Address1, Address2, City, State, ZipCode, PhoneNumber)  
VALUES ( ' emailAddress' , ' password' , ' firstName' , ' lastName' ,  
      ' streetAddress' , ' streetAddress2' , ' city' , ' state' ,  
      ' zipCode' , ' phoneNumber' )
```

SQL query to get all the categories

```
SELECT CategoryID, CategoryName FROM Categories
```

SQL query to get product information for a specific category

```
SELECT * FROM Products  
WHERE CategoryID = categoryID
```

SQL query to get product information for a product with a certain product ID

```
SELECT * FROM Products  
WHERE ProductID = ' productID'
```

SQL query to get product information for a product with a certain keyword in Title (NOTE: the % around the *keyword* is required!)

```
SELECT * FROM Products  
WHERE Title LIKE ' %keyword%'
```

SQL query to get a specific Title

```
SELECT Title FROM Products  
WHERE ProductID = ' productID'
```

**SQL query to create a preliminary order (to get order ID)**  
INSERT INTO Orders (CustomerID) VALUES (*customerID*)

**SQL query to get newly created order to get order ID**  
SELECT OrderID FROM Orders  
WHERE CustomerID = *customerID*  
AND OrderDate IS NULL

**SQL query to create the order with all details**  
UPDATE Orders SET  
ShippingCost=*shippingAmount*,  
Tax=*taxAmount*,  
Total=*grandTotalForOrder*,  
OrderDate=' *todayDate*'  
WHERE OrderID=*orderID*  
AND CustomerID=*customerID*

**SQL query to add a product to an order**  
INSERT INTO OrderDetails  
(OrderID, ProductID, Quantity, LineTotal)  
VALUES (*orderID*, '*productID*', *quantity*, '*lineTotal*')

**SQL query to get all orders for a specific customer**  
SELECT OrderID, OrderDate, ShippingCost, Tax, Total  
FROM Orders  
WHERE CustomerID = *customerID*

**SQL query to get a specific order**  
SELECT OrderID, OrderDate, ShippingCost, Tax, Total  
FROM Orders  
WHERE orderID = *orderID*

**SQL query to get all products on a specific order**  
SELECT \* FROM OrderDetails  
WHERE OrderID = *orderID*