

Internal Exam .NET

SET 2

OnlineBookStore (Database)

```
create database OnlineBookStore
```

```
go
```

```
use OnlineBookStore
```

```
go
```

```
create table books(  
    bookid int primary key,  
    title nvarchar(100) not null,  
    author nvarchar(100),  
    price decimal(10,2) not null,  
    stock int not null,  
)
```

```
create table customers(  
    customerid int primary key,  
    name nvarchar(25) not null,  
    email nvarchar(50) unique,  
    phone nvarchar(15),  
)
```

```
create table orders(  
    orderid int primary key,
```

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```
customerid int not null,  
orderdate datetime default getdate(),  
foreign key (customerid) references customers(customerid)  
)
```

```
create table orderdetails(  
orderdetailid int primary key,  
orderid int not null,  
bookid int not null,  
quantity int not null,  
foreign key (orderid) references orders(orderid),  
foreign key (bookid) references books(bookid)  
)
```

```
insert into books(bookid,title,author,price,stock) values  
(1,'C# Programming','Kathan Patel',700,5),  
(2,'C Programming','Manthan Shah',800,5),  
(3,'C++ Programming','Anshul Jangid',900,5),  
(4,'Java Programming','Evan Gregor',600,5),  
(5,'Python Programming','Tirth Ganatra',500,5);
```

```
insert into customers(customerid,name,email,phone) values  
(101,'Stany Gregor','stanygregor@gmail.com',1234567890),  
(102,'Divyansh Thakur','divyanshthakur@gmail.com',9876543210),  
(103,'James Dhandhukiya','jamesdhandhukiya@gmail.com', 6543210987);
```

```
#Program.cs
```

```
using System;
```

```
using System.Data;
```

```
using Microsoft.Data.SqlClient;
```

```
namespace OnlineBookStoreApp
```

```
{
```

```
    class Program
```

```
    {
```

```
        static void Main(string[] args)
```

```
        {
```

```
            string connectionString = @"Data Source=EVAN\SQLEXPRESS;Initial  
Catalog=OnlineBookStore;Integrated Security=True;Trust Server Certificate=True";
```

```
            using (SqlConnection conn = new SqlConnection(connectionString))
```

```
            {
```

```
                try
```

```
                {
```

```
                    SqlDataAdapter da = new SqlDataAdapter("SELECT * FROM Books", conn);
```

```
                    SqlCommandBuilder builder = new SqlCommandBuilder(da);
```

```
                    DataSet ds = new DataSet();
```

```
                    da.Fill(ds, "Books");
```

```
                    ds.Tables["Books"].PrimaryKey = new DataColumn[] {  
ds.Tables["Books"].Columns["bookid"] };
```

```
Console.WriteLine("==== Available Books =====");

foreach (DataRow row in ds.Tables["Books"].Rows)
{
    Console.WriteLine($"{row["bookid"]} - {row["title"]} by {row["author"]} | Price:
{row["price"]} | Stock: {row["stock"]}");
}

Console.WriteLine("\nEnter Book ID to update stock:");

int bookId = Convert.ToInt32(Console.ReadLine());

DataRow bookRow = ds.Tables["Books"].Rows.Find(bookId);

if (bookRow != null)
{
    Console.WriteLine($"Current Stock for '{bookRow["title"]}':
{bookRow["stock"]}");

    Console.WriteLine("Enter quantity to add:");

    int qty = Convert.ToInt32(Console.ReadLine());

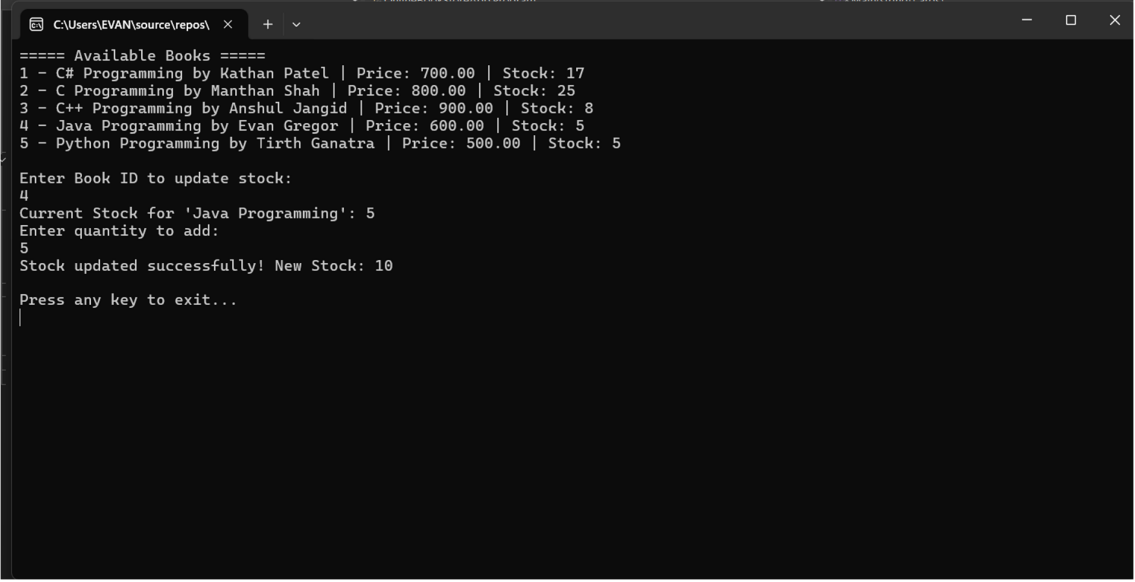
    bookRow["stock"] = Convert.ToInt32(bookRow["stock"]) + qty;

    da.Update(ds, "Books");

    Console.WriteLine($"Stock updated successfully! New Stock:
{bookRow["stock"]}");
}

else
```

```
        {  
            Console.WriteLine("Book not found!");  
        }  
    }  
  
    catch (Exception ex)  
    {  
        Console.WriteLine("Error: " + ex.Message);  
    }  
}  
  
Console.WriteLine("\nPress any key to exit...");  
Console.ReadKey();  
  
}  
  
}
```

Output:

```
C:\Users\EVAN\source\repos\...  
==== Available Books ====  
1 - C# Programming by Kathan Patel | Price: 700.00 | Stock: 17  
2 - C Programming by Manthan Shah | Price: 800.00 | Stock: 25  
3 - C++ Programming by Anshul Jangid | Price: 900.00 | Stock: 8  
4 - Java Programming by Evan Gregor | Price: 600.00 | Stock: 5  
5 - Python Programming by Tirth Ganatra | Price: 500.00 | Stock: 5  
  
Enter Book ID to update stock:  
4  
Current Stock for 'Java Programming': 5  
Enter quantity to add:  
5  
Stock updated successfully! New Stock: 10  
  
Press any key to exit...  
|
```