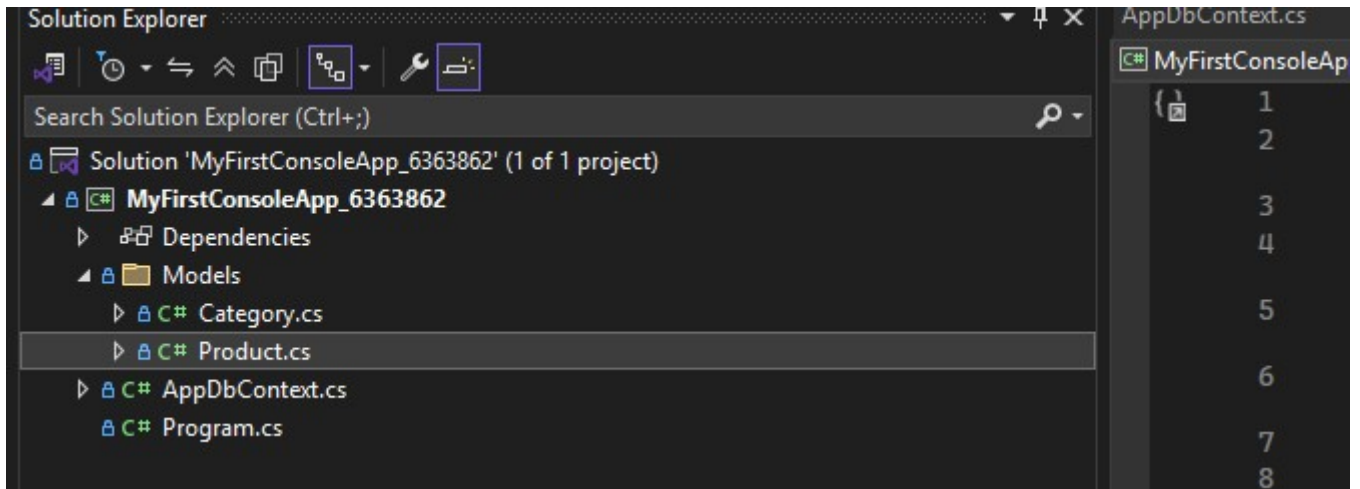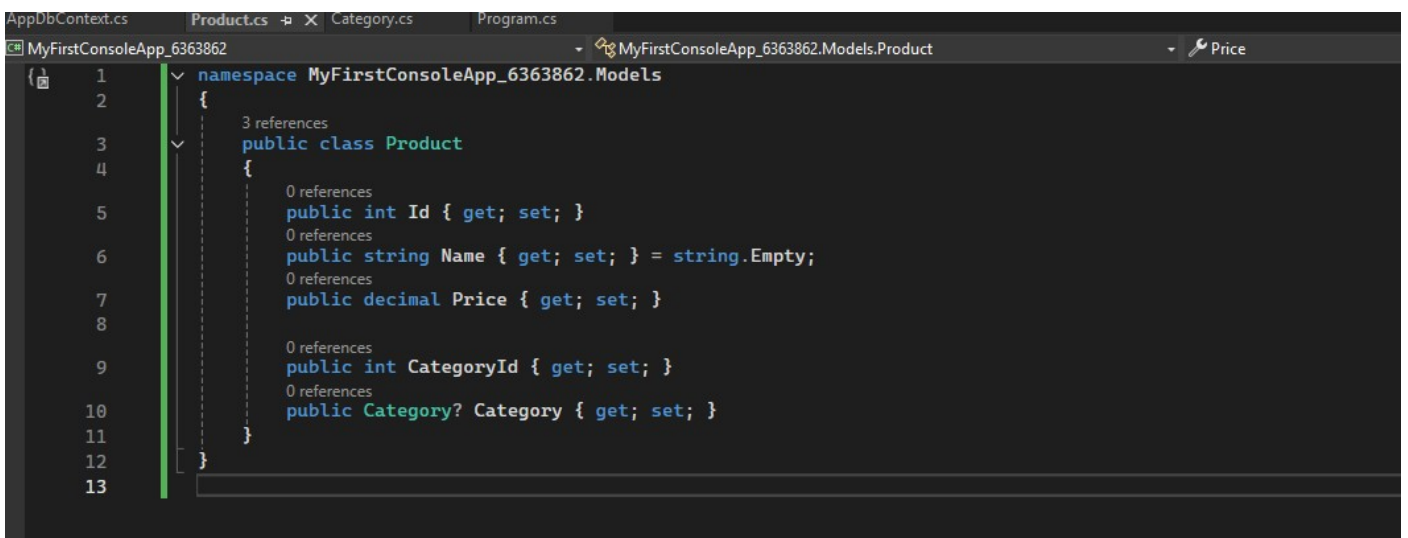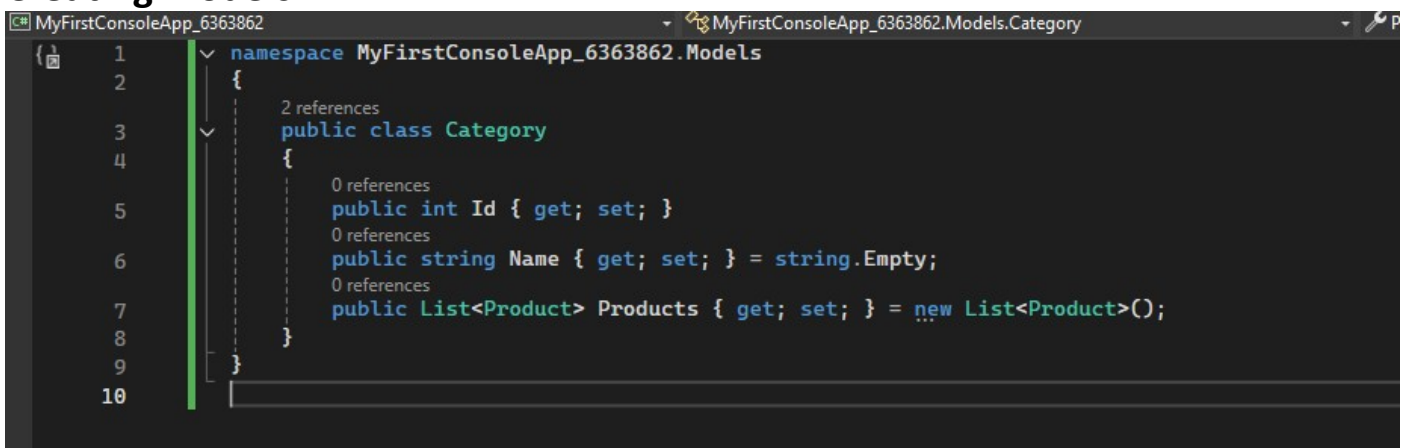# EF Core 8.0 Guided Hands-On Exercises
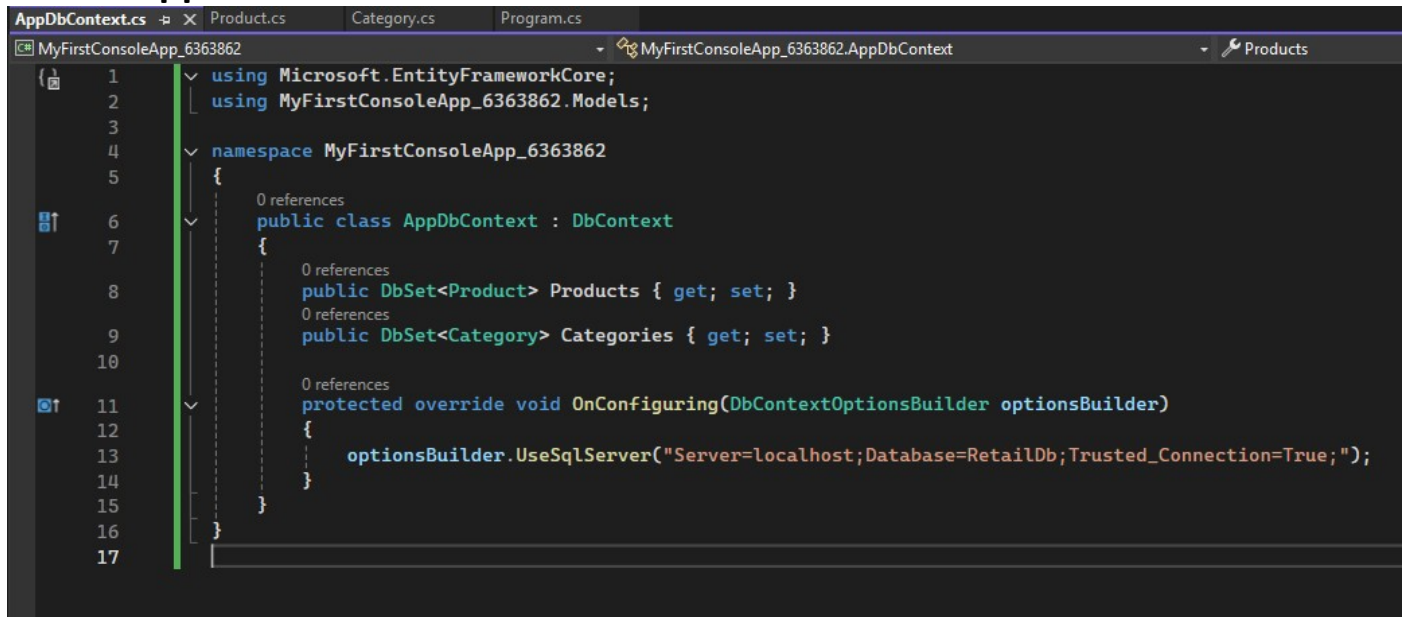
Lab 2: Setting Up the Database Context for a Retail Store

Creating models:


```csharp
namespace MyFirstConsoleApp_6363862.Models
{
    public class Category
    {
        public int Id { get; set; }
        public string Name { get; set; } = string.Empty;
        public List<Product> Products { get; set; } = new List<Product>();
    }
}
```
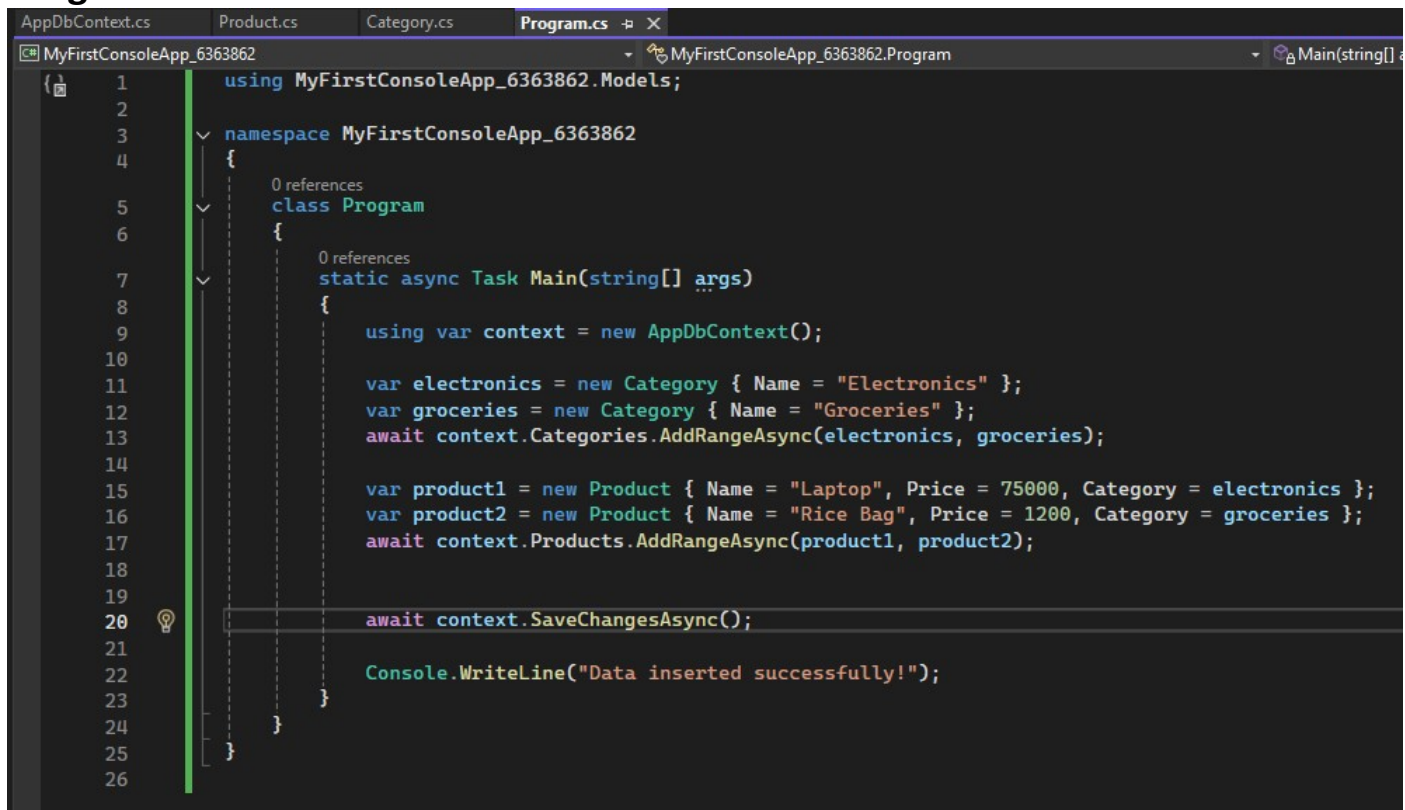


```csharp
namespace MyFirstConsoleApp_6363862.Models
{
    public class Product
    {
        public int Id { get; set; }
        public string Name { get; set; } = string.Empty;
        public decimal Price { get; set; }

        public int CategoryId { get; set; }
        public Category? Category { get; set; }
    }
}
```

Create AppDbContext:

```csharp
using Microsoft.EntityFrameworkCore;
using MyFirstConsoleApp_6363862.Models;

namespace MyFirstConsoleApp_6363862
{
    public class AppDbContext : DbContext
    {
        public DbSet<Product> Products { get; set; }
        public DbSet<Category> Categories { get; set; }

        protected override void OnConfiguring(DbContextOptionsBuilder optionsBuilder)
        {
            optionsBuilder.UseSqlServer("Server=localhost;Database=RetailDb;Trusted_Connection=True;");
        }
    }
}
```

Program.cs

```csharp
using MyFirstConsoleApp_6363862.Models;

namespace MyFirstConsoleApp_6363862
{
    class Program
    {
        static async Task Main(string[] args)
        {
            using var context = new AppDbContext();

            var electronics = new Category { Name = "Electronics" };
            var groceries = new Category { Name = "Groceries" };
            await context.Categories.AddRangeAsync(electronics, groceries);

            var product1 = new Product { Name = "Laptop", Price = 75000, Category = electronics };
            var product2 = new Product { Name = "Rice Bag", Price = 1200, Category = groceries };
            await context.Products.AddRangeAsync(product1, product2);


            await context.SaveChangesAsync();

            Console.WriteLine("Data inserted successfully!");
        }
    }
}
```