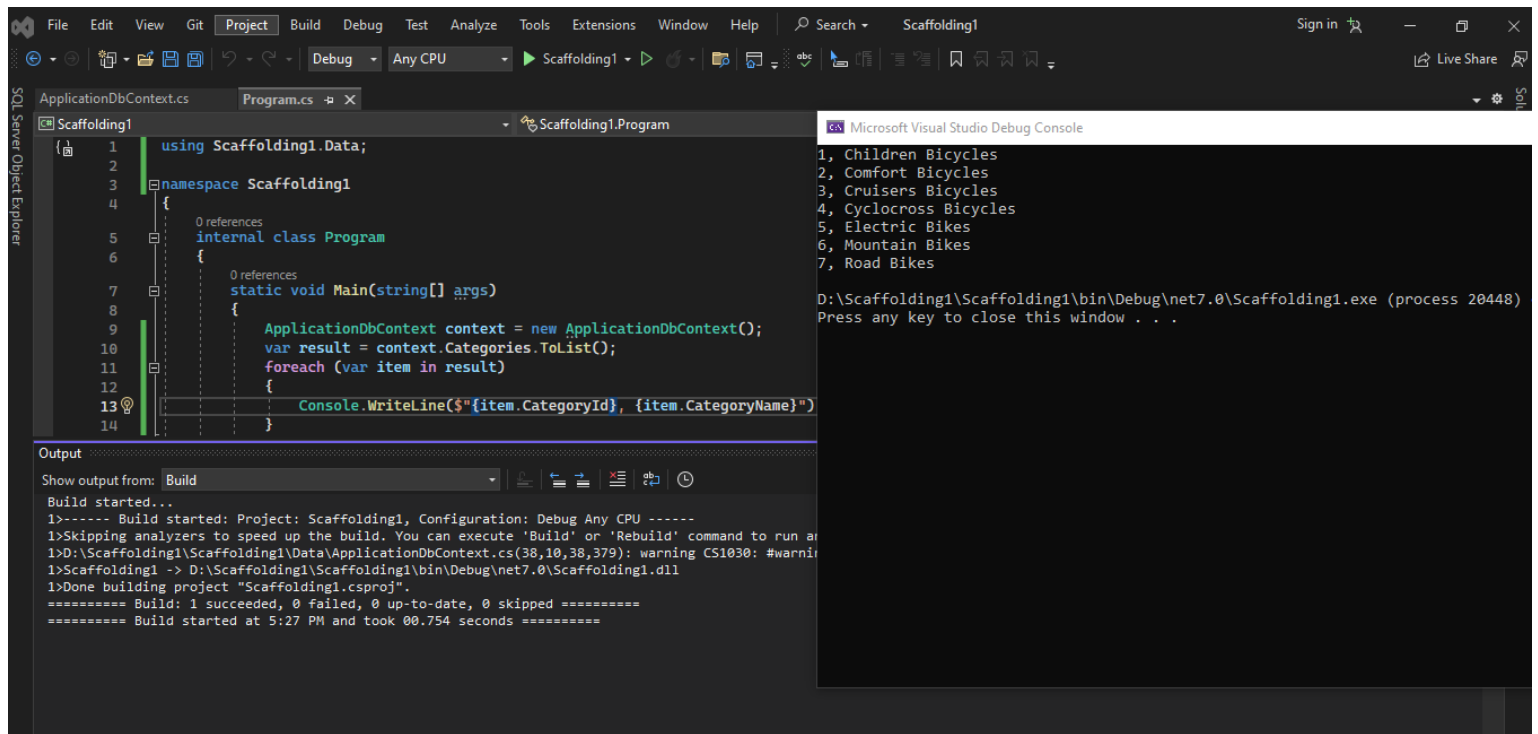


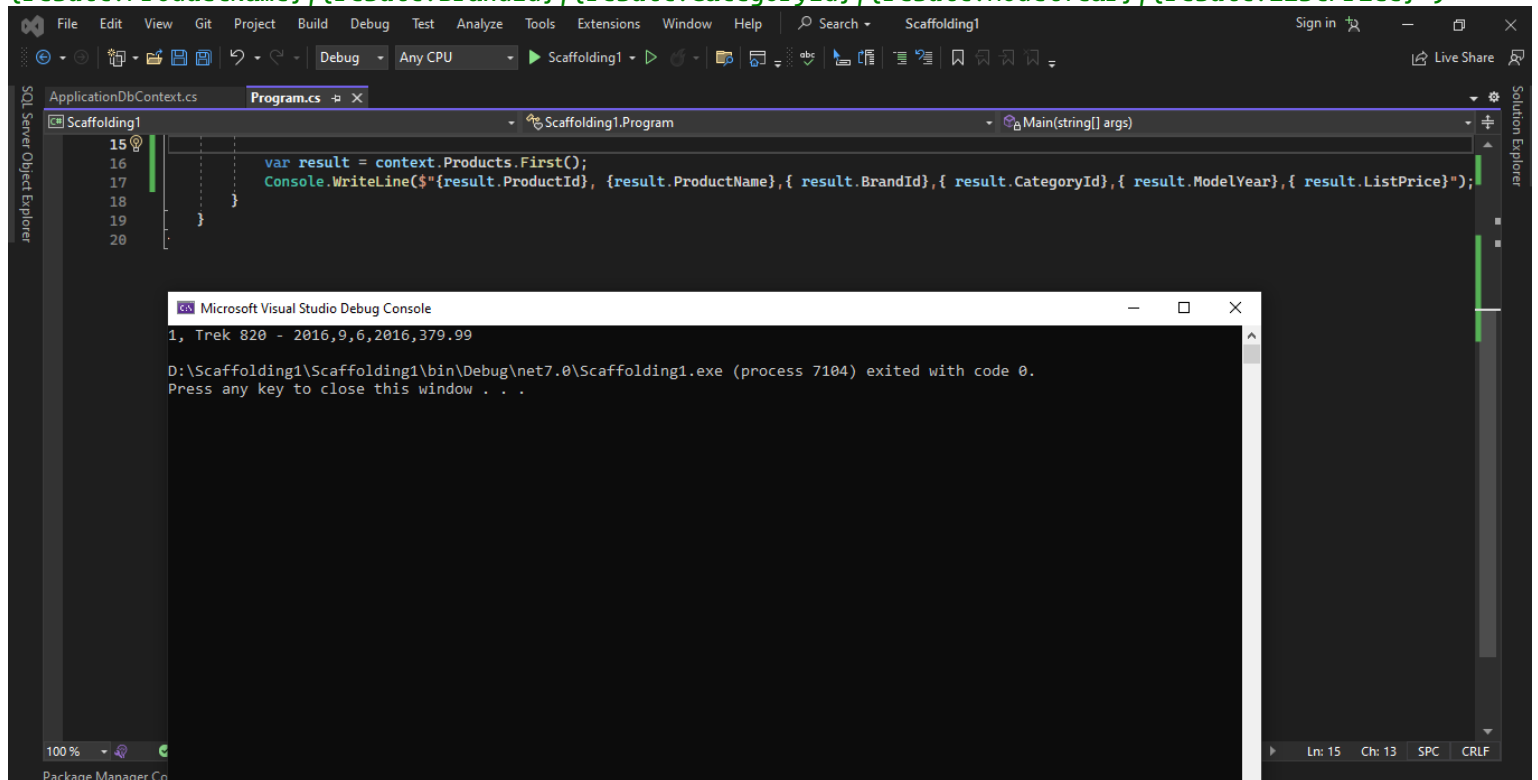
Retrieve all categories from the production.categories table.

```
ApplicationDbContext context = new ApplicationDbContext();  
var result = context.Categories.ToList();  
foreach (var item in result)  
{  
    Console.WriteLine($"{item.CategoryId}, {item.CategoryName}");  
}
```



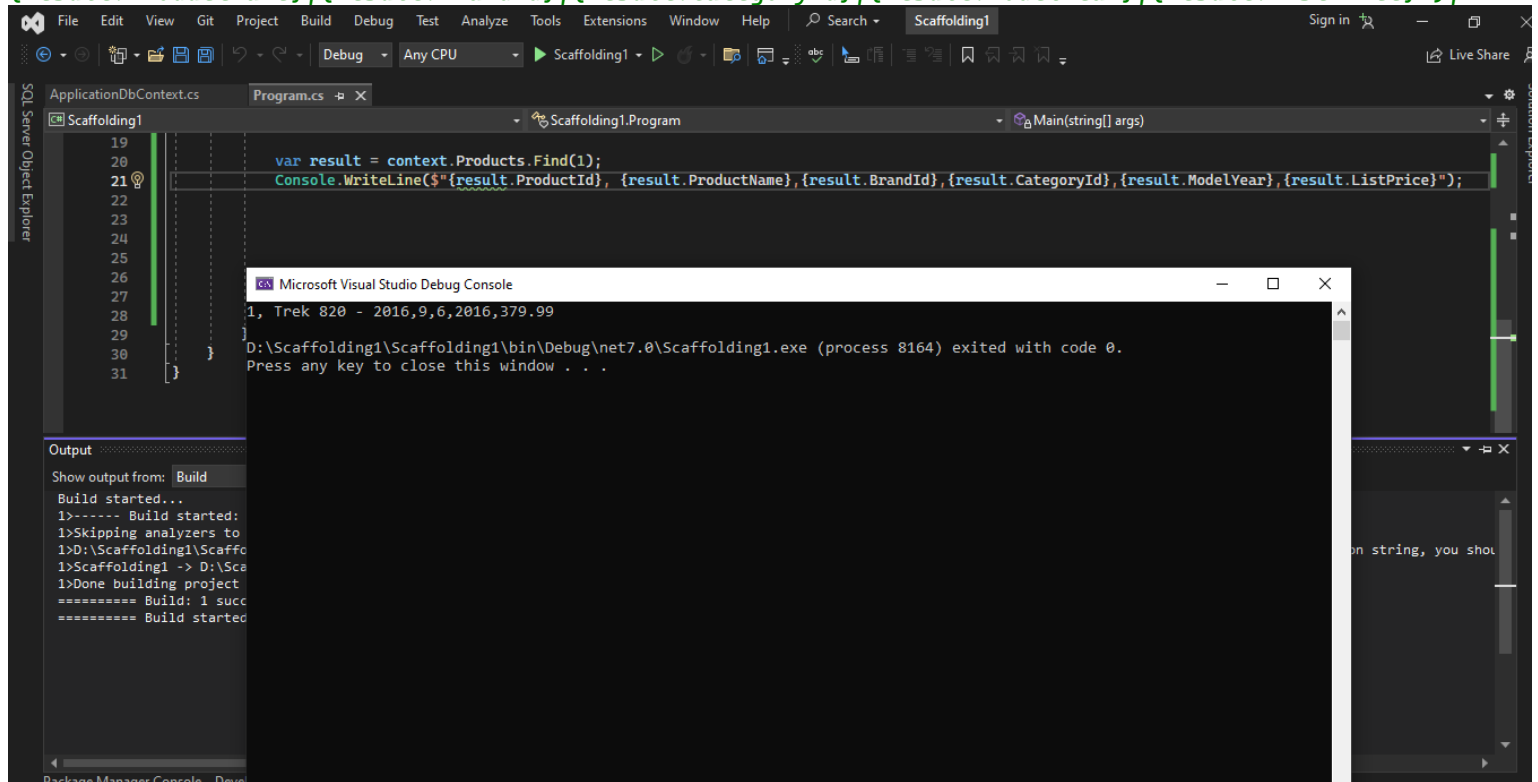
Retrieve the first product from the production.products table.

```
ApplicationDbContext context = new ApplicationDbContext();  
var result = context.Products.First();  
Console.WriteLine($"{result.ProductId},  
{result.ProductName},{result.BrandId},{result.CategoryId},{result.ModelYear},{result.ListPrice}")
```



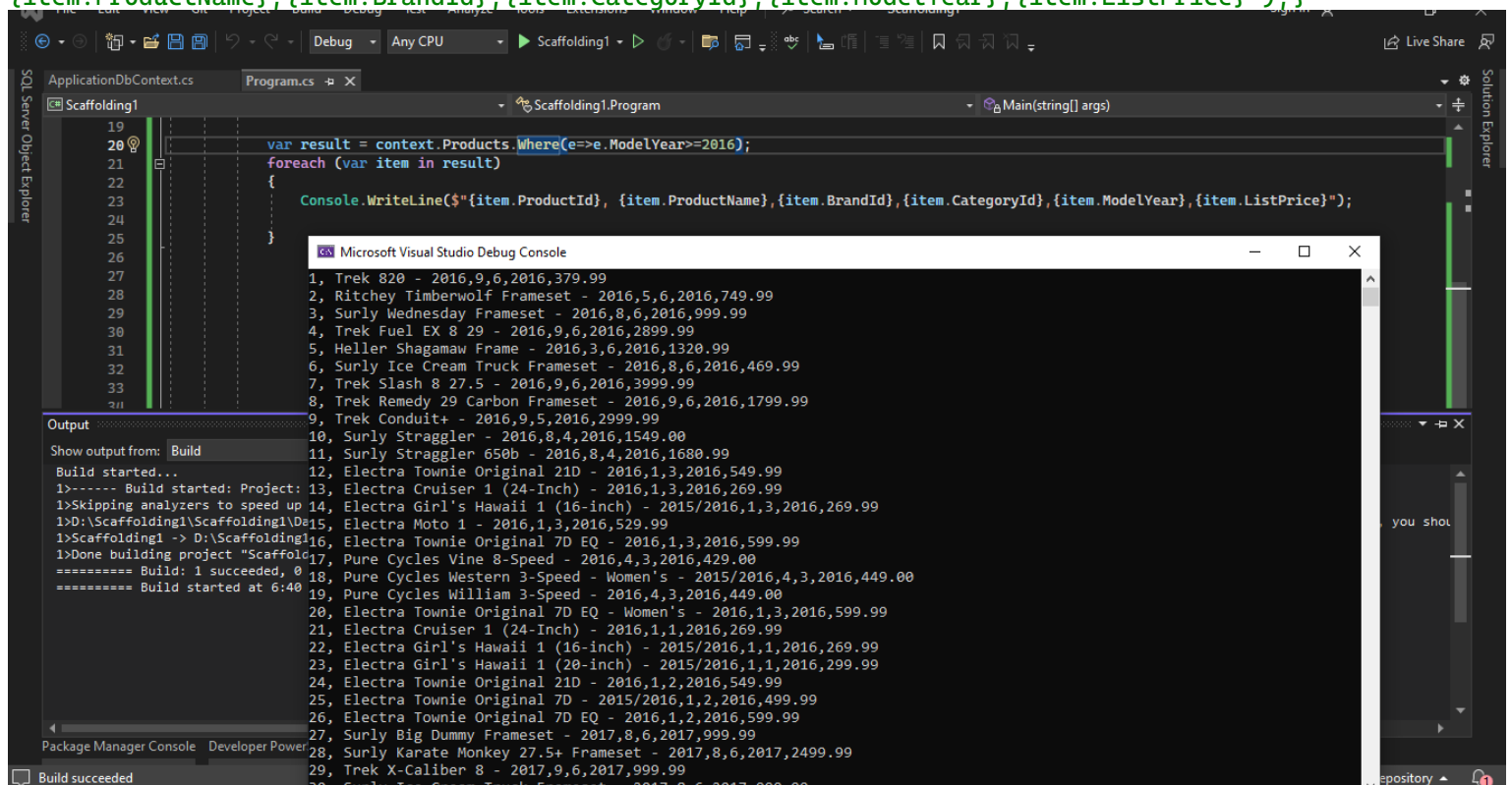
Retrieve a specific product from the production.products table by ID.

```
ApplicationDbContext context = new ApplicationDbContext();  
var result = context.Products.Find(1);  
    Console.WriteLine($"{result.ProductId},  
{result.ProductName},{result.BrandId},{result.CategoryId},{result.ModelYear},{result.ListPrice}");
```



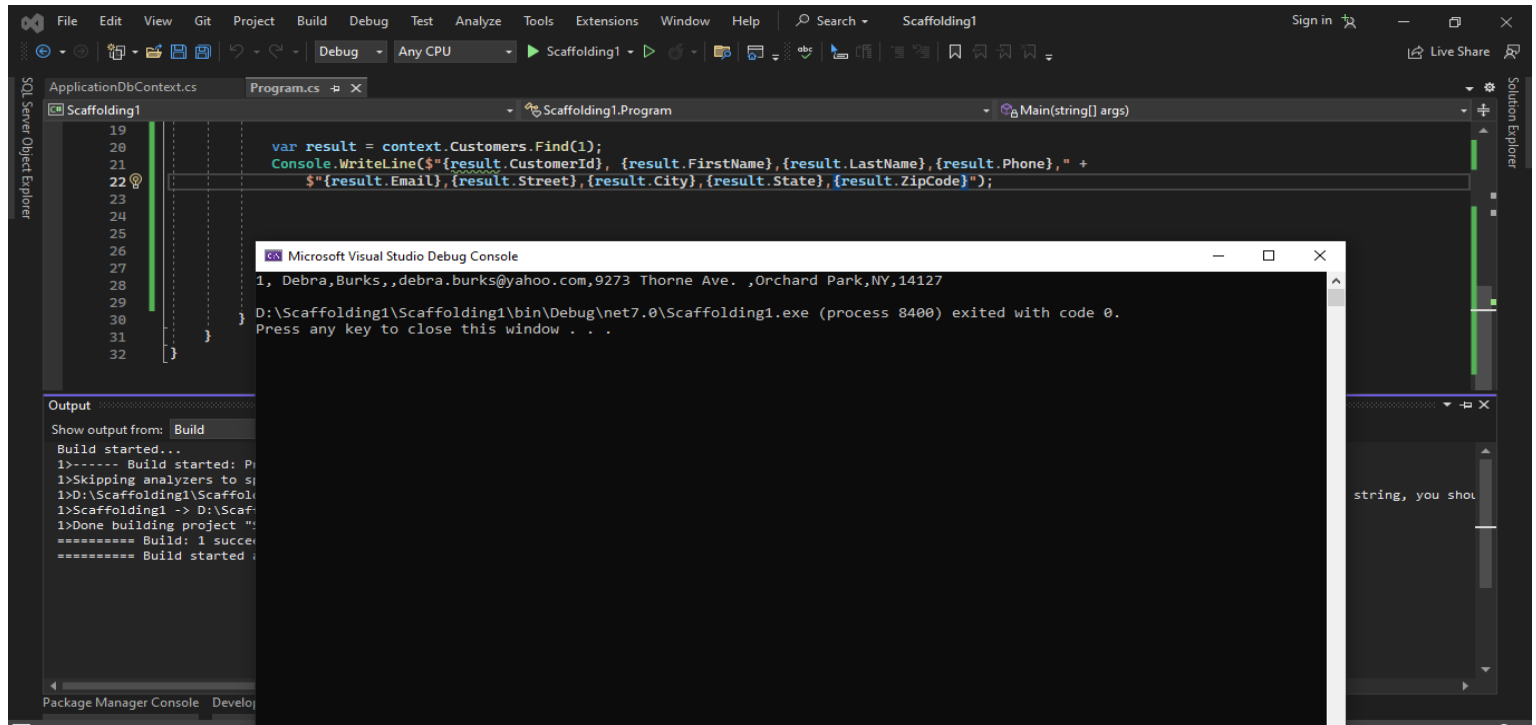
Retrieve all products from the production.products table with a certain model year.

```
ApplicationDbContext context = new ApplicationDbContext();  
var result = context.Products.Where(e => e.ModelYear >= 2016);  
    foreach (var item in result)  
    {  
        Console.WriteLine($"{item.ProductId},  
{item.ProductName},{item.BrandId},{item.CategoryId},{item.ModelYear},{item.ListPrice}");  
    }
```



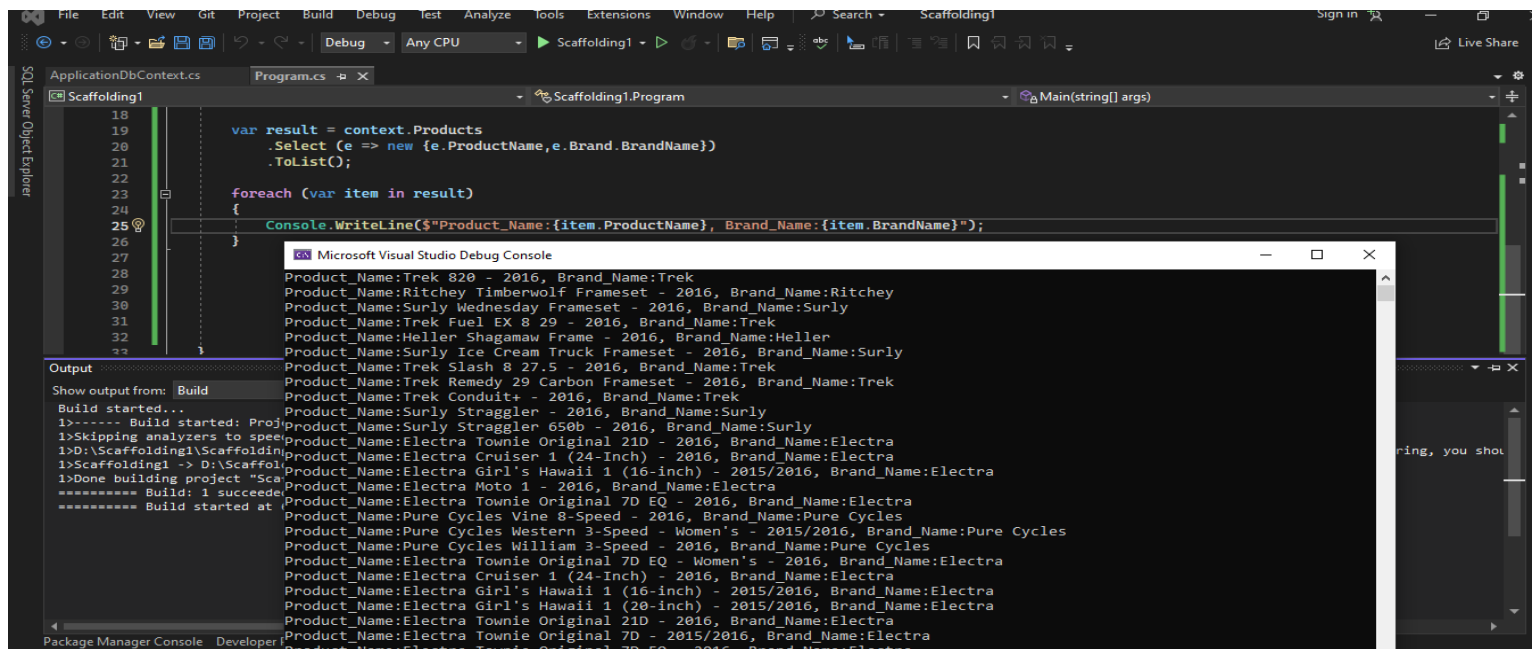
Retrieve a specific customer from the sales.customers table by ID.

```
ApplicationDbContext context = new ApplicationDbContext();  
var result = context.Customers.Find(1);  
    Console.WriteLine($"{result.CustomerId},  
{result.FirstName},{result.LastName},{result.Phone}," +  
    $"{result.Email},{result.Street},{result.City},{result.State},{result.ZipCode}");
```



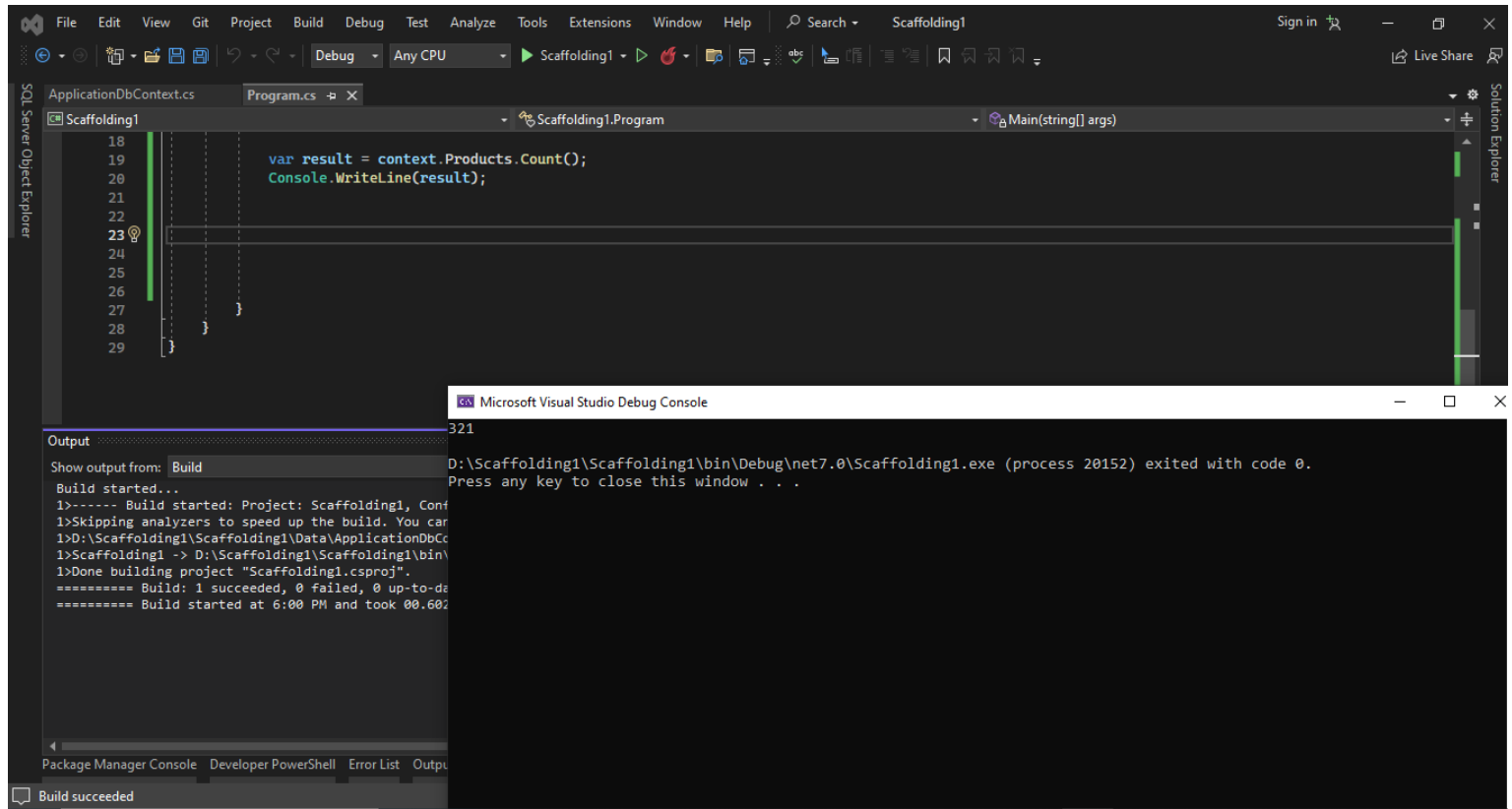
Retrieve a list of product names and their corresponding brand names.

```
ApplicationDbContext context = new ApplicationDbContext();  
var result = context.Products  
    .Select(e => new { e.ProductName, e.Brand.BrandName })  
    .ToList();  
  
foreach (var item in result)  
{  
    Console.WriteLine($"Product_Name:{item.ProductName},  
Brand_Name:{item.BrandName}");  
}
```



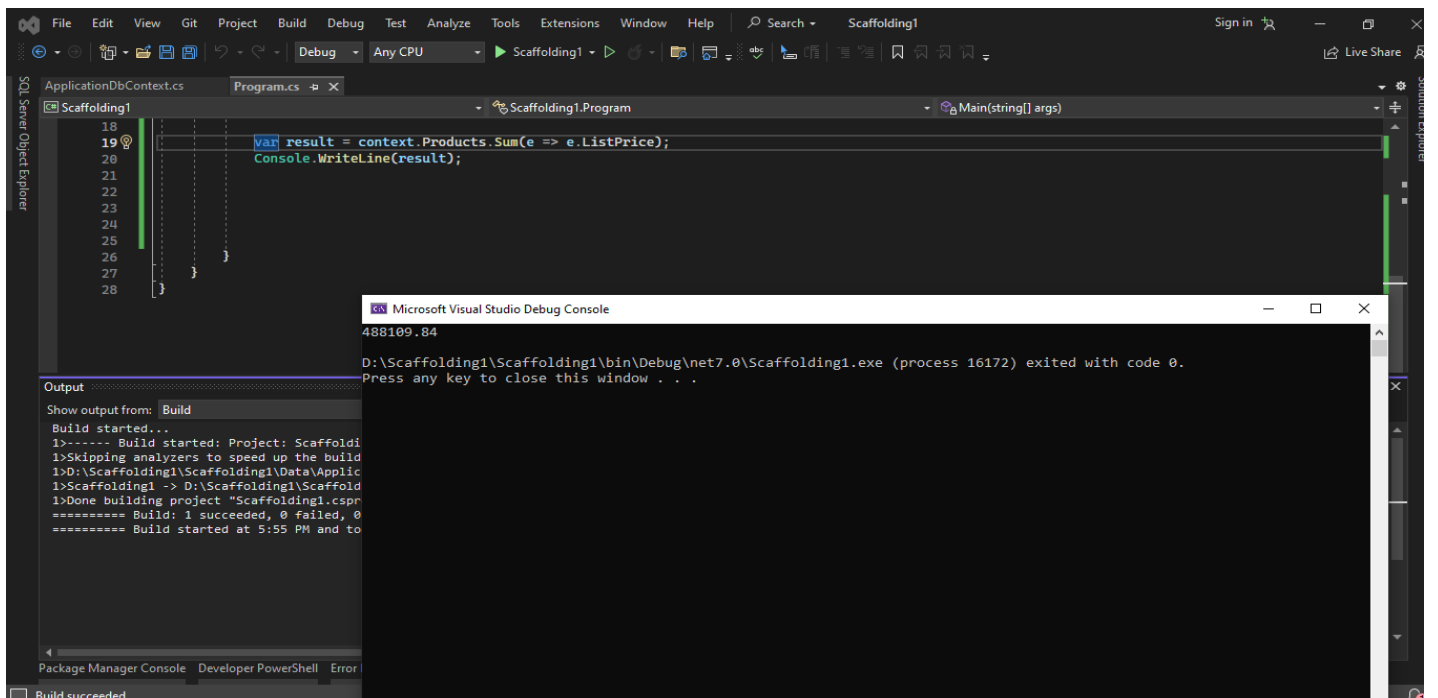
Count the number of products in a specific category.

```
ApplicationDbContext context = new ApplicationDbContext();  
var result = context.Products.Count();  
Console.WriteLine(result);
```



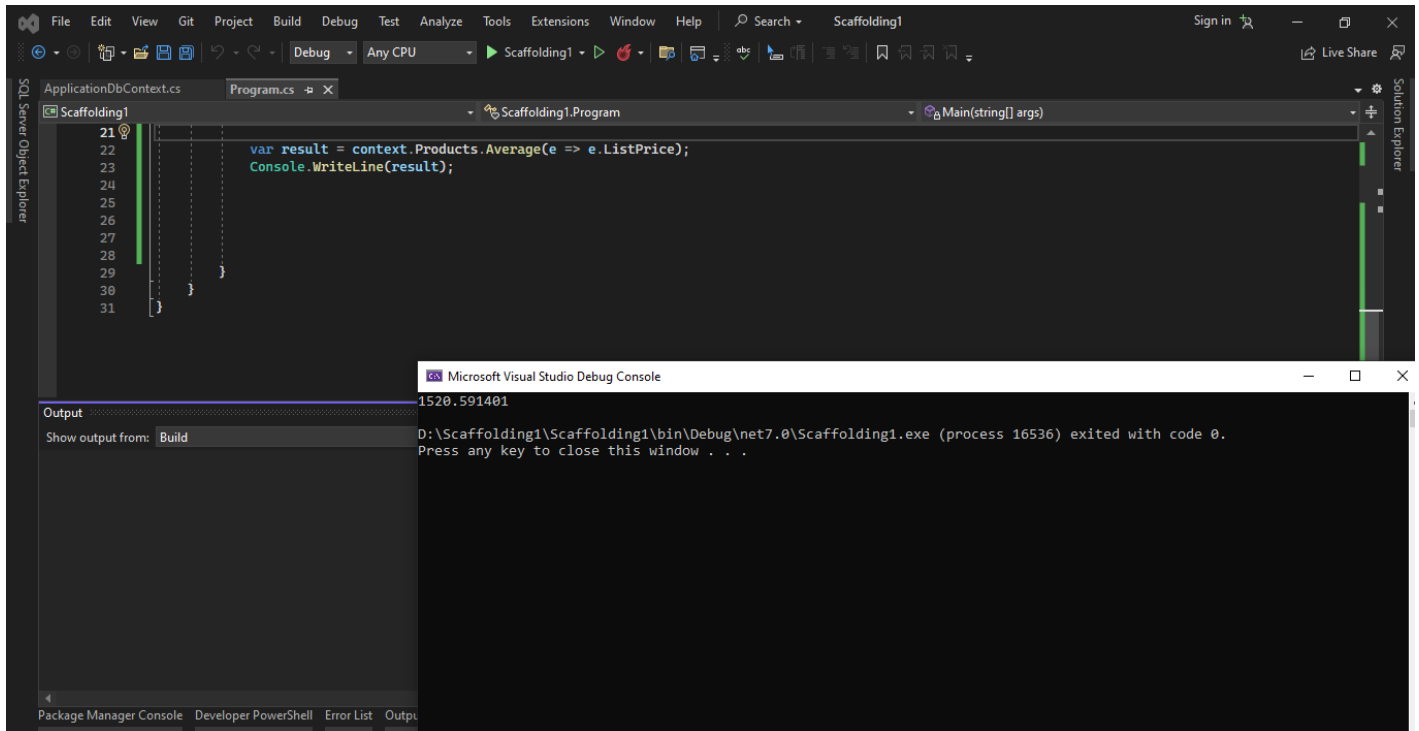
Calculate the total list price of all products in a specific category.

```
ApplicationDbContext context = new ApplicationDbContext();  
Var result = context.Products.Sum(e => e.ListPrice);  
Console.WriteLine(result);
```



Calculate the average list price of products.

```
ApplicationDbContext context = new ApplicationDbContext();  
var result = context.Products.Average(e => e.ListPrice);  
Console.WriteLine(result);
```



Retrieve orders that are completed.

```
ApplicationDbContext context = new ApplicationDbContext();  
var result = context.Orders.Where(e => e.OrderStatus == 4).ToList();  
  
foreach (var item in result)  
{  
    Console.WriteLine($"{item.OrderId},  
{item.CustomerId},{item.OrderStatus},{item.OrderDate},{item.RequiredDate},{item.StoreId},{item.StaffId  
}");  
}
```

