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}");
                            }
                                                                                                            Scaffolding1
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                                    Debug - Any CPU

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                                                                                                  Microsoft Visual Studio Debug Console
                  using Scaffolding1.Data;
     (淸
                                                                                                    Children Bicycles
                                                                                                 2, Comfort Bicycles
3, Cruisers Bicycles
               ⊡namespace Scaffolding1
                                                                                                 4, Cyclocross Bicycles
5, Electric Bikes
                      internal class Program
                                                                                                 6, Mountain Bikes
7, Road Bikes
                           Oreferences
static void Main(string[] args)
                                                                                                 D:\Scaffolding1\Scaffolding1\bin\Debug\net7.0\Scaffolding1.exe (process 20448)
                                                                                                 Press any key to close this window .
                              var result = context.Categories.ToList();
                               foreach (var item in result)
                                  Console.WriteLine($"{item.CategoryId}, {item.CategoryName}")
           13 ®
   Output
                                                                = = | = | ⊕ | ©
   Show output from: Build
    Build started.
    1>----- Build started: Project: Scaffoldingl, Configuration: Debug Any CPU -----
1>Skipping analyzers to speed up the build. You can execute 'Build' or 'Rebuild' command to run a
    1>D:\Scaffolding1\Scaffolding1\Data\ApplicationDbContext.cs(38,10,38,379): warning CS1030: #warnin
1>Scaffolding1 -> D:\Scaffolding1\Scaffolding1\bin\Debug\net7.0\Scaffolding1.dll
```

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}")
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    Scaffolding1.Program

    ▼ Main(string[] args)

         15 ®
                         var result = context.Products.First();
                         Console.WriteLine($"{result.ProductId}, {result.ProductName},{ result.BrandId},{ result.CategoryId},{ result.ModelYear},{ result.ListPrice}");
                Microsoft Visual Studio Debug Console
                                                                                                                  1, Trek 820 - 2016,9,6,2016,379.99
               D:\Scaffolding1\Scaffolding1\bin\Debug\net7.0\Scaffolding1.exe (process 7104) exited with code 0.
               Press any key to close this window .
```

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}");
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    ♥A Main(string[] args)

                            var result = context.Products.Find(1):
                            Console WriteLine($"{result.ProductId}, {result.ProductName},{result.BrandId},{result.CategoryId},{result.ModelYear},{result.ListPrice}");
          21 ®
                         Microsoft Visual Studio Debug Console
                                                                                                                                    ×
                           Trek 820 - 2016,9,6,2016,379.99
                         D:\Scaffolding1\Scaffolding1\bin\Debug\net7.0\Scaffolding1.exe (process 8164) exited with code 0.
                         Press any key to close this window .
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    Build started...
           - Build started:
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     1>Done building project
====== Build: 1 succ
====== Build started
```

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}");}
                          Debug - Any CPU

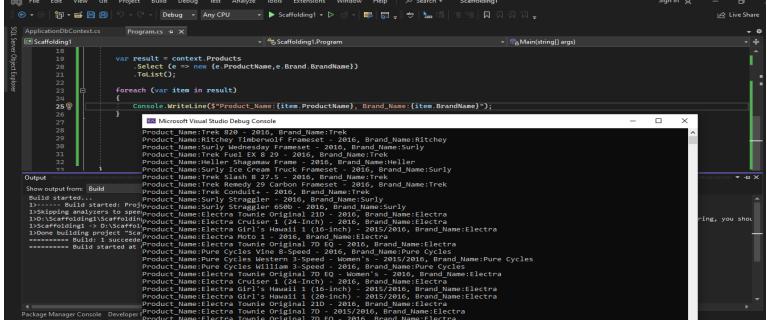
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        20 P
                      var result = context.Products.Where(e=>e.ModelYear>=2016);
                      foreach (var item in result)
                         Console.WriteLine($"{item.ProductId}, {item.ProductName},{item.BrandId},{item.CategoryId},{item.ModelYear},{item.ListPrice}");
        24
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  Microsoft Visual Studio Debug Console
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```

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

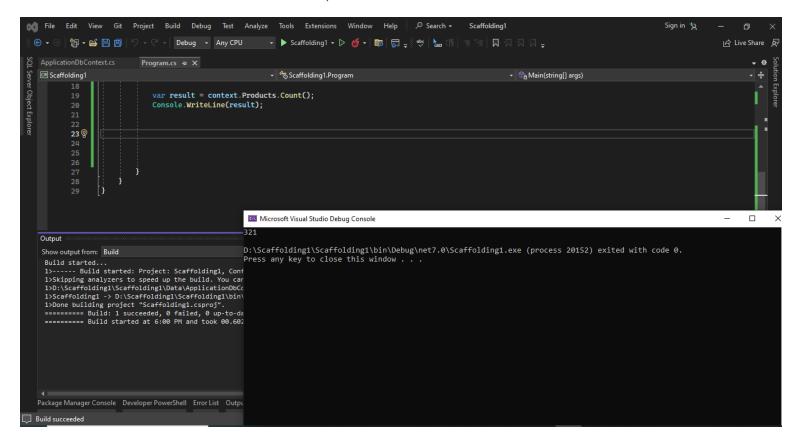
```
ApplicationDbContext context = new ApplicationDbContext();
ar result = context.Customers.Find(1);
                           Console.WriteLine($"{result.CustomerId},
{result.FirstName}, {result.LastName}, {result.Phone}, " +
                                  $"{result.Email}, {result.Street}, {result.City}, {result.State}, {result.ZipCode}");
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                             var result = context.Customers.Find(1);
Console.WriteLine($"{result.CustomerId}, {result.FirstName},{result.LastName},{result.Phone}," +
$"{result.Email}, {result.Street},{result.City},{result.State},{result.ZipCode}");
           22 ®
                            Microsoft Visual Studio Debug Console
                                                                                                                                               ×
                               Debra,Burks,,debra.burks@yahoo.com,9273 Thorne Ave. ,Orchard Park,NY,14127
                            D:\Scaffolding1\Scaffolding1\bin\Debug\net7.0\Scaffolding1.exe (process 8400) exited with code 0. Press any key to close this window . . .
    Output
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```

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

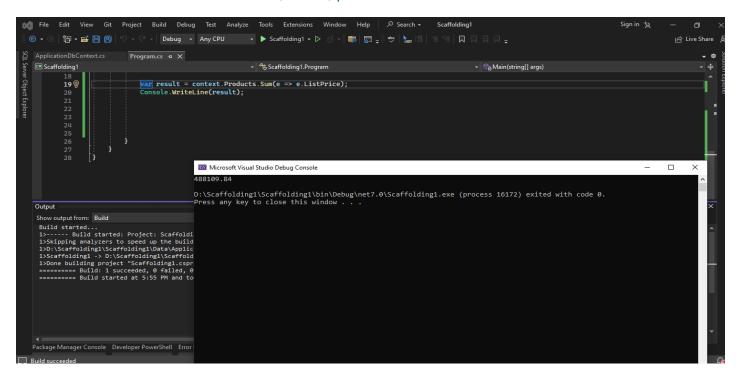


Count the number of products in a specific category.

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



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



Calculate the average list price of products.

```
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                           var result = context.Products.Average(e => e.ListPrice);
                          Console.WriteLine(result):
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                                                 Microsoft Visual Studio Debug Console
                                                                                                                                                                      Output
 Show output from: Build
                                                D:\Scaffolding1\Scaffolding1\bin\Debug\net7.0\Scaffolding1.exe (process 16536) exited with code 0.
```

Retrieve orders that are completed.

```
ApplicationDbContext context = new ApplicationDbContext();
ar result = context.Orders.Where(e => e.OrderStatus == 4).ToList();
                               foreach (var item in result)
                                       Console.WriteLine($"{item.OrderId},
{item.CustomerId}, {item.OrderStatus}, {item.OrderDate}, {item.RequiredDate}, {item.StoreId}, {item.StaffId
}"); }
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                                                                                                                            + Sa Main(string[] args)
                            var result = context.Orders.Where(e => e.OrderStatus == 4).ToList();
                                Console .WriteLine($"{item.OrderId}, {item.CustomerId}, {item.OrderStatus}, {item.OrderDate}, {item.RequiredDate}, {item.StoreId}, {item.StaffId}");
            25 ®
                              Microsoft Visual Studio Debug Console
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                                229,4,1/1/2016 12:00:00 AM,1/3/2016 12:00:00 AM,1,2
1212,4,1/1/2016 12:00:00 AM,1/4/2016 12:00:00 AM,2,6
523,4,1/2/2016 12:00:00 AM,1/5/2016 12:00:00 AM,2,7
175,4,1/3/2016 12:00:00 AM,1/4/2016 12:00:00 AM,1,3
1324,4,1/3/2016 12:00:00 AM,1/6/2016 12:00:00 AM,2,6
94,4,1/4/2016 12:00:00 AM,1/7/2016 12:00:00 AM,2,6
                             7, 324,4,1/4/2016 12:00:00 AM,1/7/2016 12:00:00 AM,2,6
8, 1204,4,1/4/2016 12:00:00 AM,1/5/2016 12:00:00 AM,2,7
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                             21, 1250,4,1/15/2016 12:00:00 AM,1/16/2016 12:00:00 AM, 22, 1035,4,1/16/2016 12:00:00 AM,1/18/2016 12:00:00 AM,
                             23, 1149,4,1/16/2016 12:00:00 AM,1/19/2016 12:00:00 AM
                             24, 636,4,1/18/2016 12:00:00 AM,1/20/2016 12:00:00 AM,2
25, 657,4,1/18/2016 12:00:00 AM,1/21/2016 12:00:00 AM,2
                                 1280,4,1/18/2016 12:00:00 AM,1/21/2016 12:00:00 57,4,1/19/2016 12:00:00 AM,1/21/2016 12:00:00 AM
```