Task Rira

سلام

از اینکه وقتتون را به من اختصاص دادید متشکرم.

امیدوارم همکاری خوبی با شما داشته باشیم.

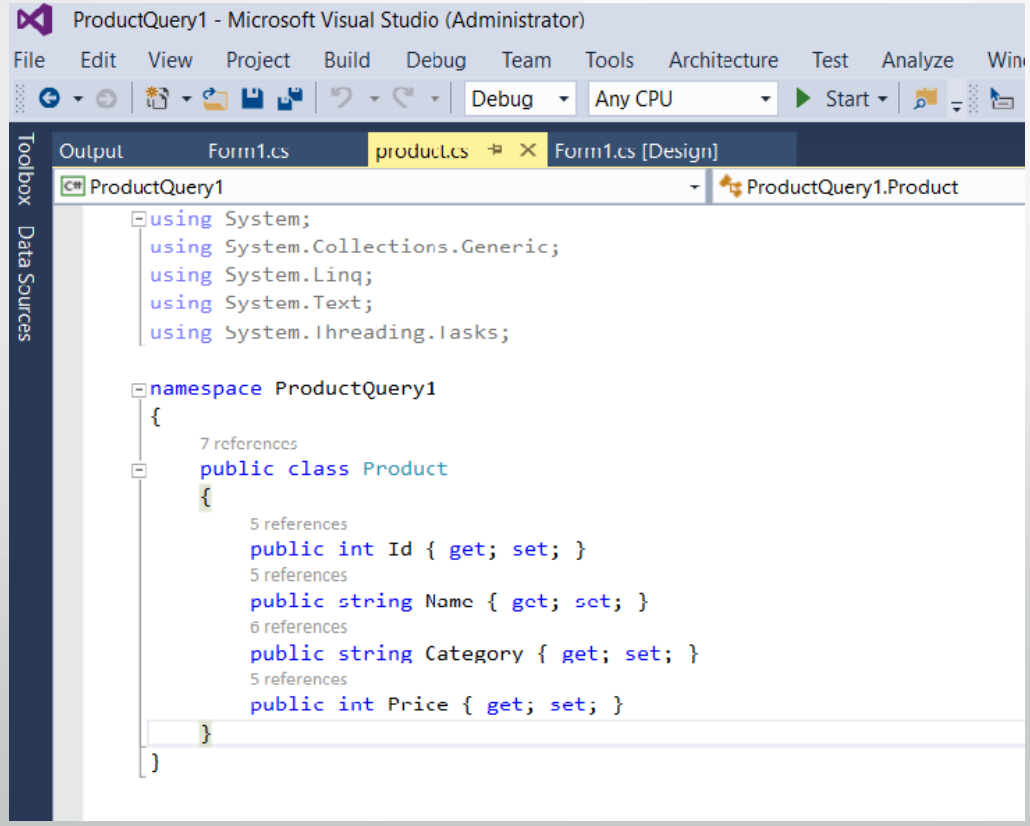
هدف من برای کارآموزی در حوزه Back End پیشرفت در زمینه برنامه نویسی Back End به ویژه بخش net. است.

تمامی کوئری های نوشته شده در برنامه Visual Studio بخش windows form application پیاده سازی شده است.

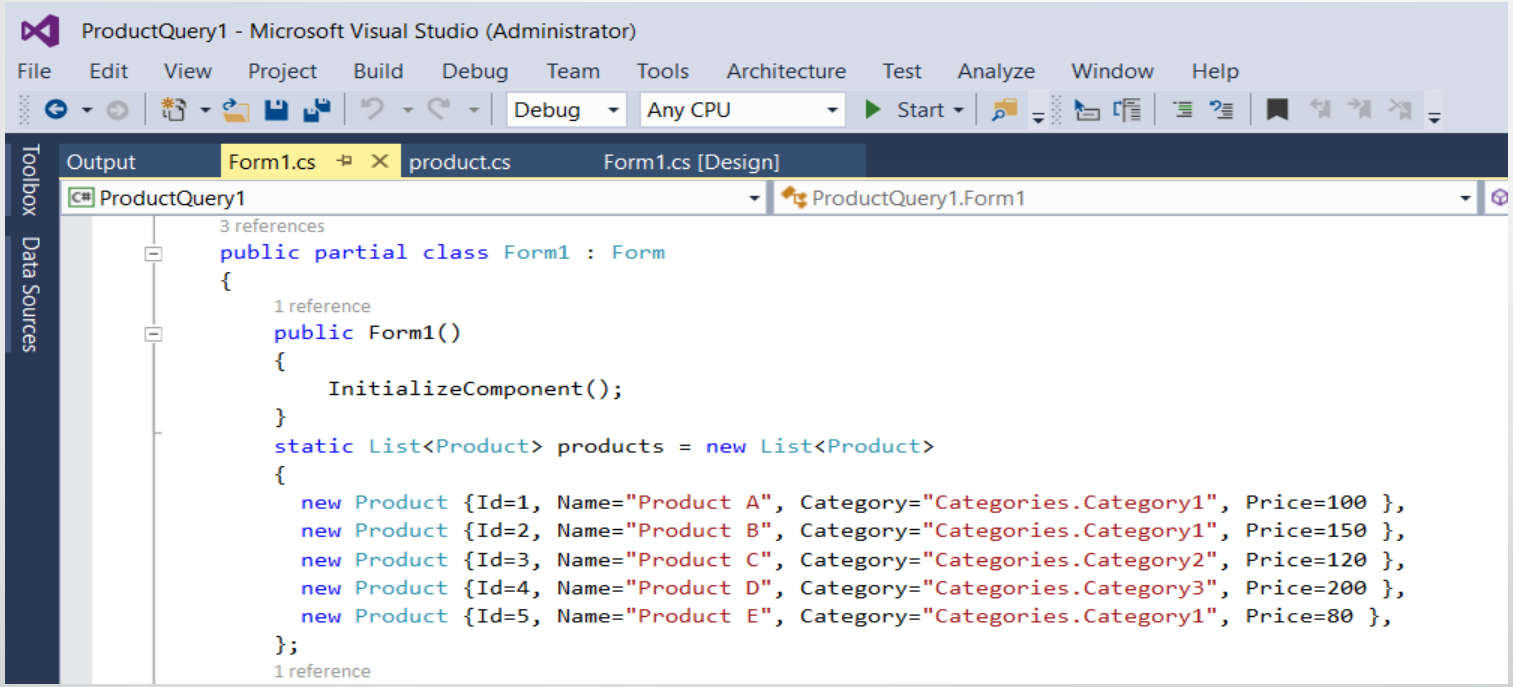
زینب نادی

ایجاد List از داده ها

برای ایجاده یک از داده ها نیاز است نوع و مشخصه های اصلی() مشخص شود به این منظور من یک کلاس را به طور مشترک برای همه‌ی بخش تعریف کردم

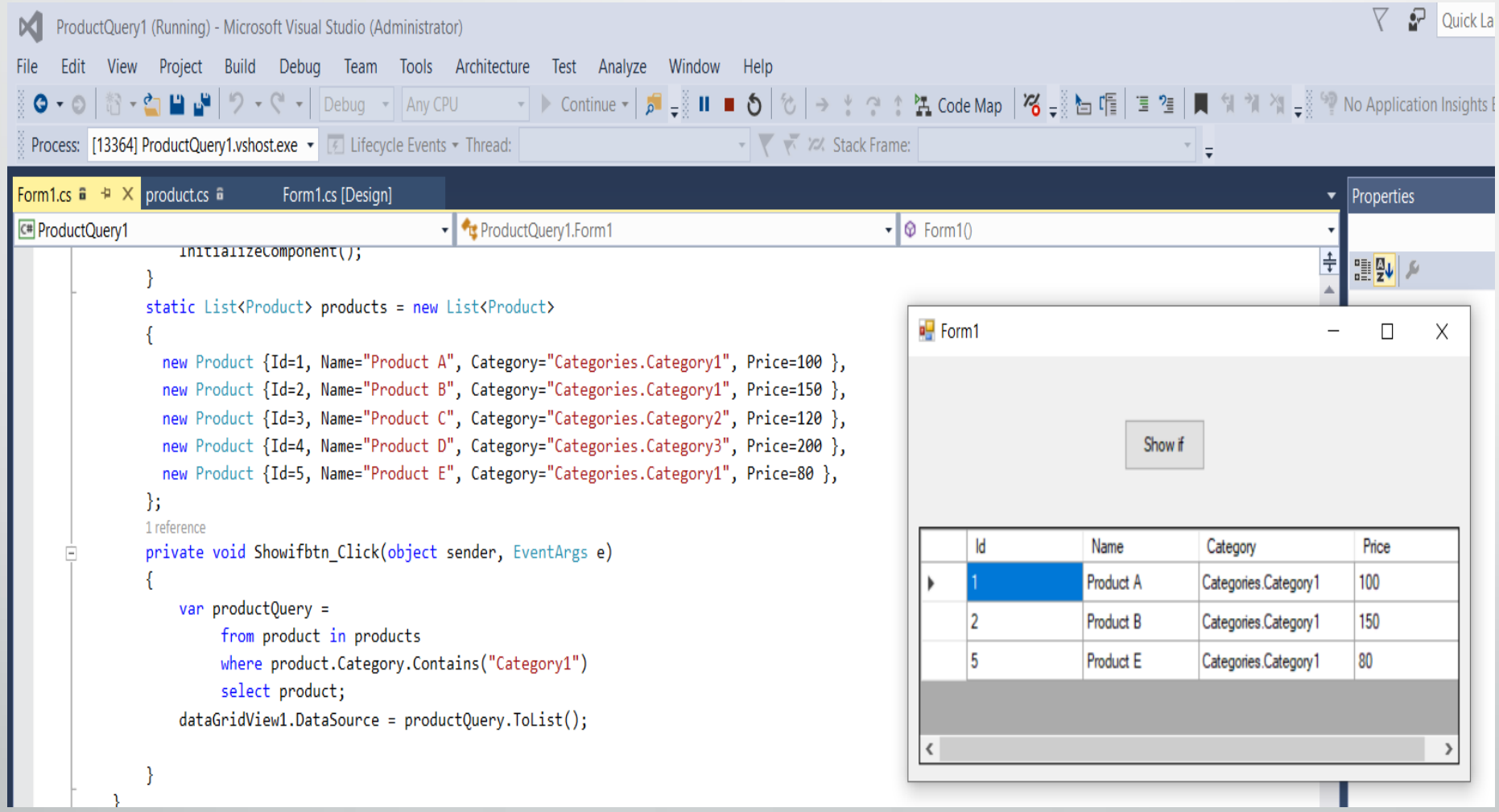


سپس با توجه به class ایجادشده List داده ها را ایجاد کردم.



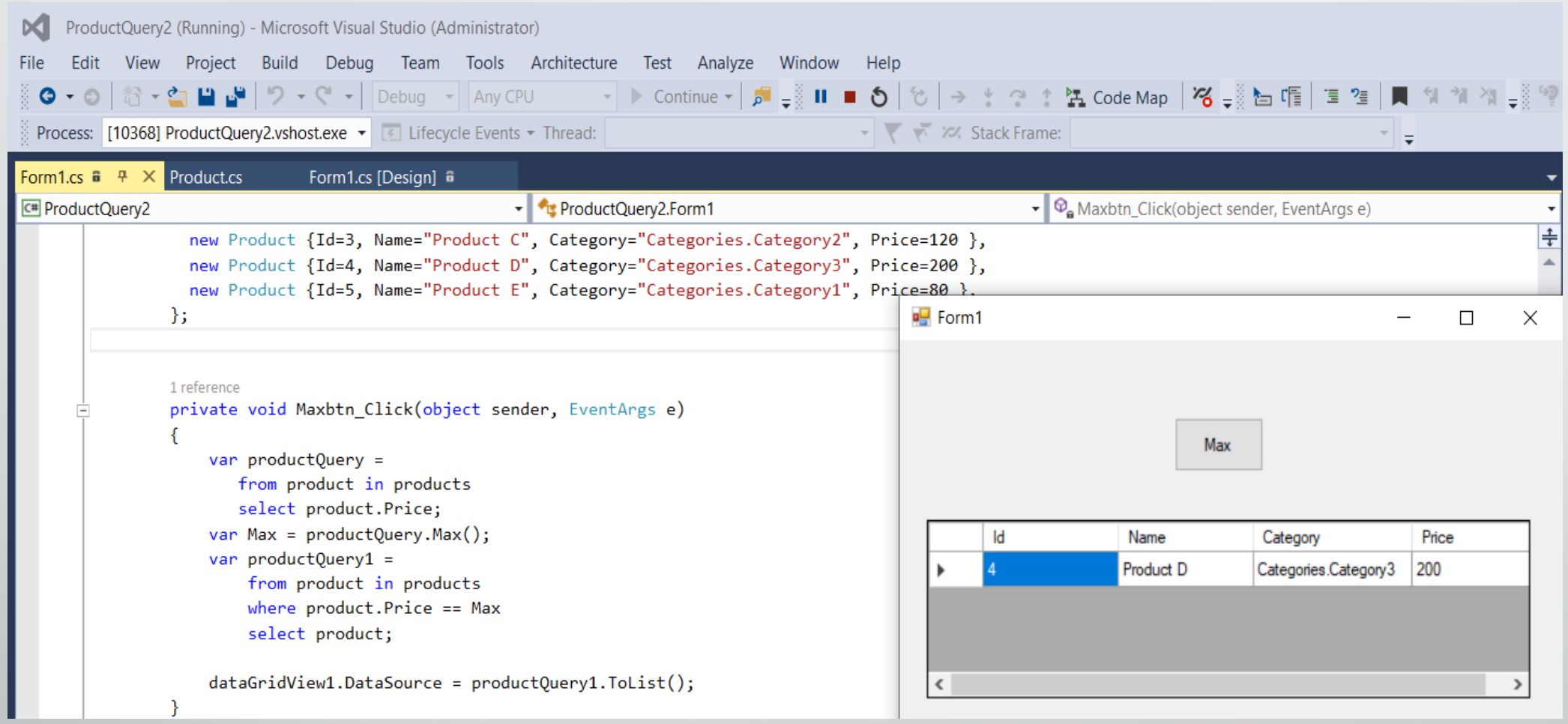
کوئری1 :

```
1 reference
private void Showifbtn_Click(object sender, EventArgs e)
{
    var productQuery =
         from product in products
         where product.Category.Contains("Category1")
         select product;
    dataGridView1.DataSource = productQuery.ToList();

}
```


ProductQuery1 (Running) - Microsoft Visual Studio (Administrator)
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug
Any CPU
Continue
Code Map
Process: [13364] ProductQuery1.vshost.exe
Lifecycle Events
Thread:
Stack Frame:
Form1.cs
product.cs
Form1.cs [Design]
Properties
ProductQuery1
ProductQuery1.Form1
Form1()
InitializeComponent();
}
static List<Product> products = new List<Product>
{
new Product {Id=1, Name="Product A", Category="Categories.Category1", Price=100 },
new Product {Id=2, Name="Product B", Category="Categories.Category1", Price=150 },
new Product {Id=3, Name="Product C", Category="Categories.Category2", Price=120 },
new Product {Id=4, Name="Product D", Category="Categories.Category3", Price=200 },
new Product {Id=5, Name="Product E", Category="Categories.Category1", Price=80 },
};
1 reference
private void Showifbtn_Click(object sender, EventArgs e)
{
var productQuery =
from product in products
where product.Category.Contains("Category1")
select product;
dataGridView1.DataSource = productQuery.ToList();
}
}
Form1
Show if
Id
Name
Category
Price
1
Product A
Categories.Category1
100
2
Product B
Categories.Category1
150
5
Product E
Categories.Category1
80

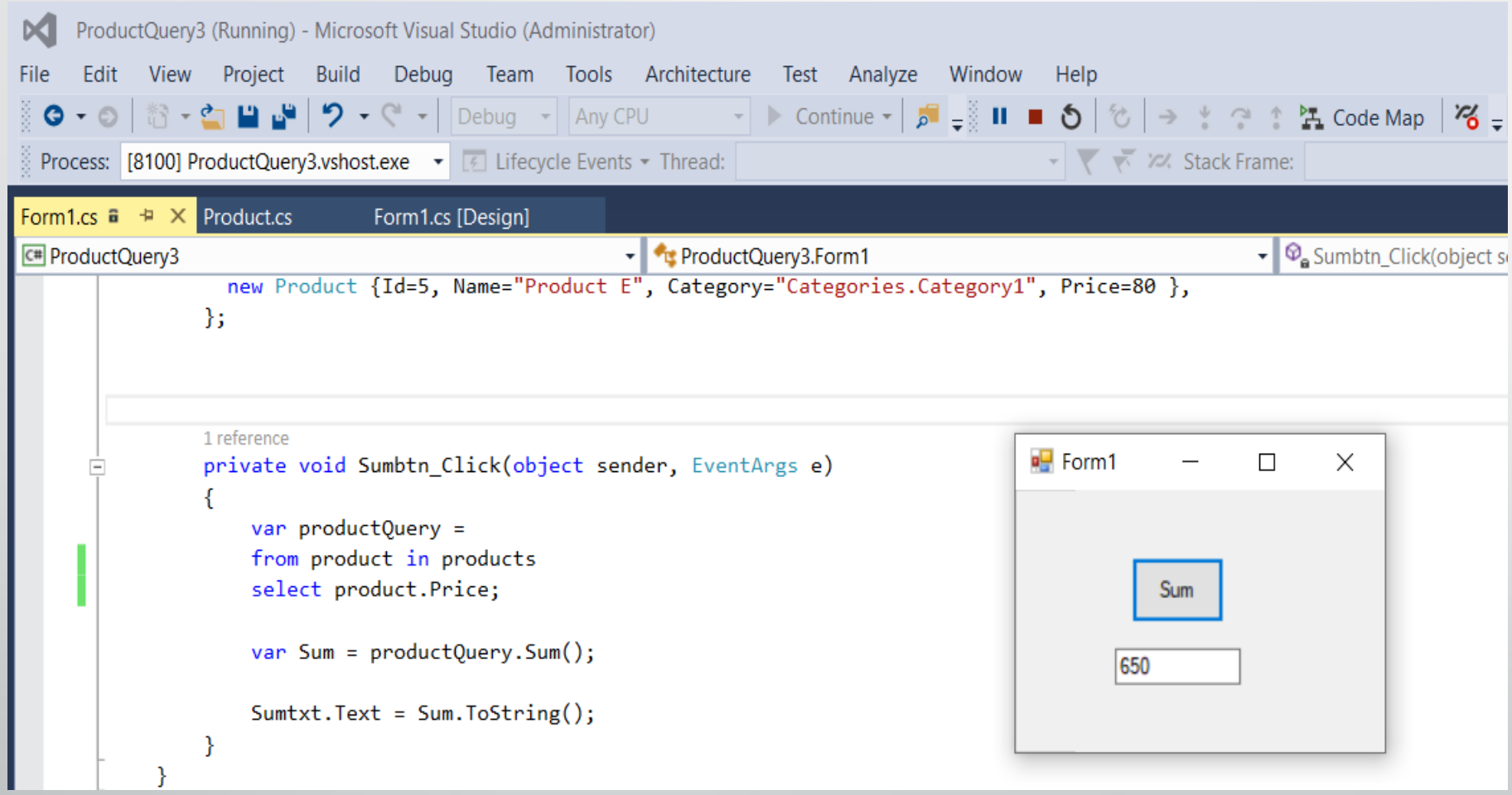
کوئری2 :

```
1 reference
private void Maxbtn_Click(object sender, EventArgs e)
{
    var productQuery =
       from product in products
       select product.Price;
    var Max = productQuery.Max();
    var productQuery1 =
        from product in products
        where product.Price == Max
        select product;

    dataGridView1.DataSource = productQuery1.ToList();
}
```


ProductQuery2 (Running) - Microsoft Visual Studio (Administrator)
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug
Any CPU
Continue
Code Map
Process: [10368] ProductQuery2.vshost.exe
Lifecycle Events
Thread:
Stack Frame:
Form1.cs
Product.cs
Form1.cs [Design]
ProductQuery2
ProductQuery2.Form1
Maxbtn_Click(object sender, EventArgs e)
new Product {Id=3, Name="Product C", Category="Categories.Category2", Price=120 },
new Product {Id=4, Name="Product D", Category="Categories.Category3", Price=200 },
new Product {Id=5, Name="Product E", Category="Categories.Category1", Price=80 },
};
1 reference
private void Maxbtn_Click(object sender, EventArgs e)
{
var productQuery =
from product in products
select product.Price;
var Max = productQuery.Max();
var productQuery1 =
from product in products
where product.Price == Max
select product;
dataGridView1.DataSource = productQuery1.ToList();
}
Form1
Max
Id
Name
Category
Price
4
Product D
Categories.Category3
200

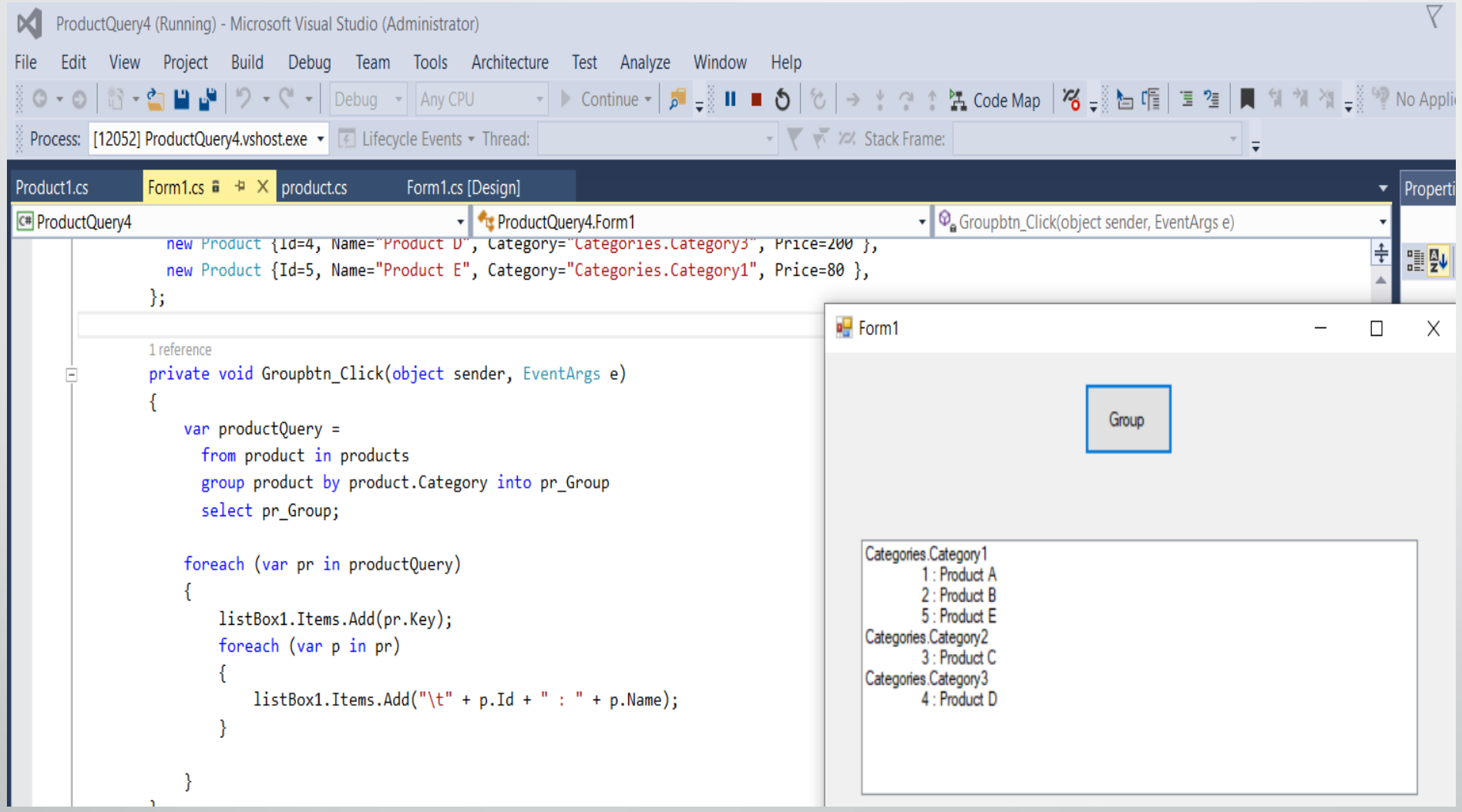
کوئری3 :

```
1 reference
private void Sumbtn_Click(object sender, EventArgs e)
{
    var productQuery =
    from product in products
    select product.Price;

    var Sum = productQuery.Sum();

    Sumtxt.Text = Sum.ToString();
}
```


ProductQuery3 (Running) - Microsoft Visual Studio (Administrator)
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug
Any CPU
Continue
Code Map
Process: [8100] ProductQuery3.vshost.exe
Lifecycle Events
Thread:
Stack Frame:
Form1.cs
Product.cs
Form1.cs [Design]
ProductQuery3
ProductQuery3.Form1
Sumbtn_Click(object s
new Product {Id=5, Name="Product E", Category="Categories.Category1", Price=80 },
};
1 reference
private void Sumbtn_Click(object sender, EventArgs e)
{
var productQuery =
from product in products
select product.Price;
var Sum = productQuery.Sum();
Sumtxt.Text = Sum.ToString();
}
}
Form1
Sum
650

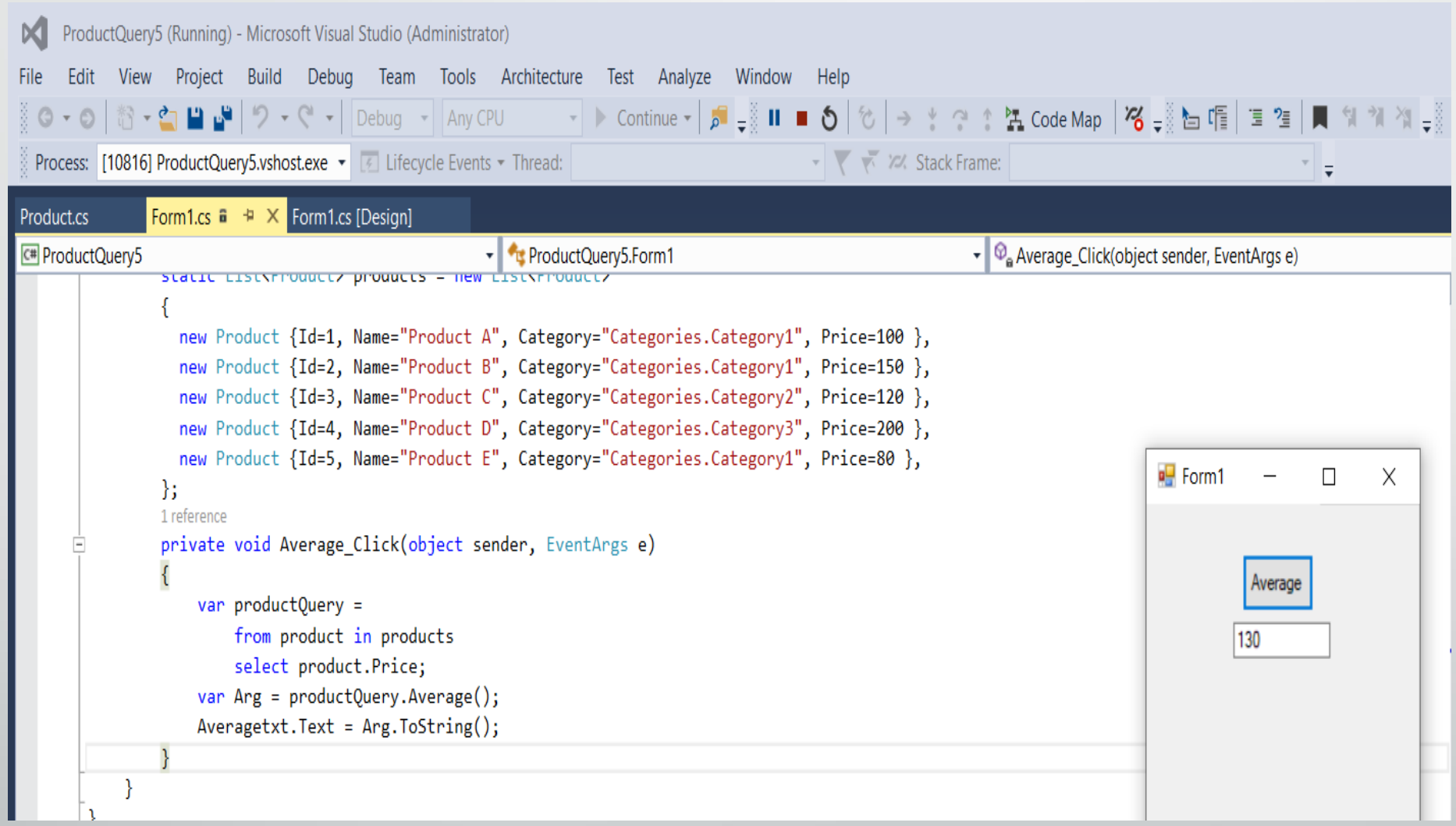
کوئری4 :

```
1 reference
private void Groupbtn_Click(object sender, EventArgs e)
{
    var productQuery =
      from product in products
      group product by product.Category into pr_Group
      select pr_Group;

    foreach (var pr in productQuery)
    {
        listBox1.Items.Add(pr.Key);
        foreach (var p in pr)
        {
            listBox1.Items.Add("\t" + p.Id + " : " + p.Name);
        }
```


ProductQuery4 (Running) - Microsoft Visual Studio (Administrator)
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug
Any CPU
Continue
Code Map
Process: [12052] ProductQuery4.vshost.exe
Lifecycle Events
Thread:
Stack Frame:
Product1.cs
Form1.cs
product.cs
Form1.cs [Design]
ProductQuery4
ProductQuery4.Form1
Groupbtn_Click(object sender, EventArgs e)
new Product {Id=4, Name="Product D", Category="Categories.Category3", Price=200 },
new Product {Id=5, Name="Product E", Category="Categories.Category1", Price=80 },
};
1 reference
private void Groupbtn_Click(object sender, EventArgs e)
{
var productQuery =
from product in products
group product by product.Category into pr_Group
select pr_Group;
foreach (var pr in productQuery)
{
listBox1.Items.Add(pr.Key);
foreach (var p in pr)
{
listBox1.Items.Add("\t" + p.Id + " : " + p.Name);
}
}
Form1
Group
Categories.Category1
1 : Product A
2 : Product B
5 : Product E
Categories.Category2
3 : Product C
Categories.Category3
4 : Product D

کوئری5 :

```
1 reference
private void Average_Click(object sender, EventArgs e)
{
    var productQuery =
        from product in products
        select product.Price;
    var Arg = productQuery.Average();
    Averagetxt.Text = Arg.ToString();
}
}
```


ProductQuery5 (Running) - Microsoft Visual Studio (Administrator)
File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help
Debug
Any CPU
Continue
Code Map
Process: [10816] ProductQuery5.vshost.exe
Lifecycle Events
Thread:
Stack Frame:
Product.cs
Form1.cs
Form1.cs [Design]
ProductQuery5
ProductQuery5.Form1
Average_Click(object sender, EventArgs e)
{
new Product {Id=1, Name="Product A", Category="Categories.Category1", Price=100 },
new Product {Id=2, Name="Product B", Category="Categories.Category1", Price=150 },
new Product {Id=3, Name="Product C", Category="Categories.Category2", Price=120 },
new Product {Id=4, Name="Product D", Category="Categories.Category3", Price=200 },
new Product {Id=5, Name="Product E", Category="Categories.Category1", Price=80 },
};
1 reference
private void Average_Click(object sender, EventArgs e)
{
var productQuery =
from product in products
select product.Price;
var Arg = productQuery.Average();
Averagetxt.Text = Arg.ToString();
}
}
Form1
Average
130