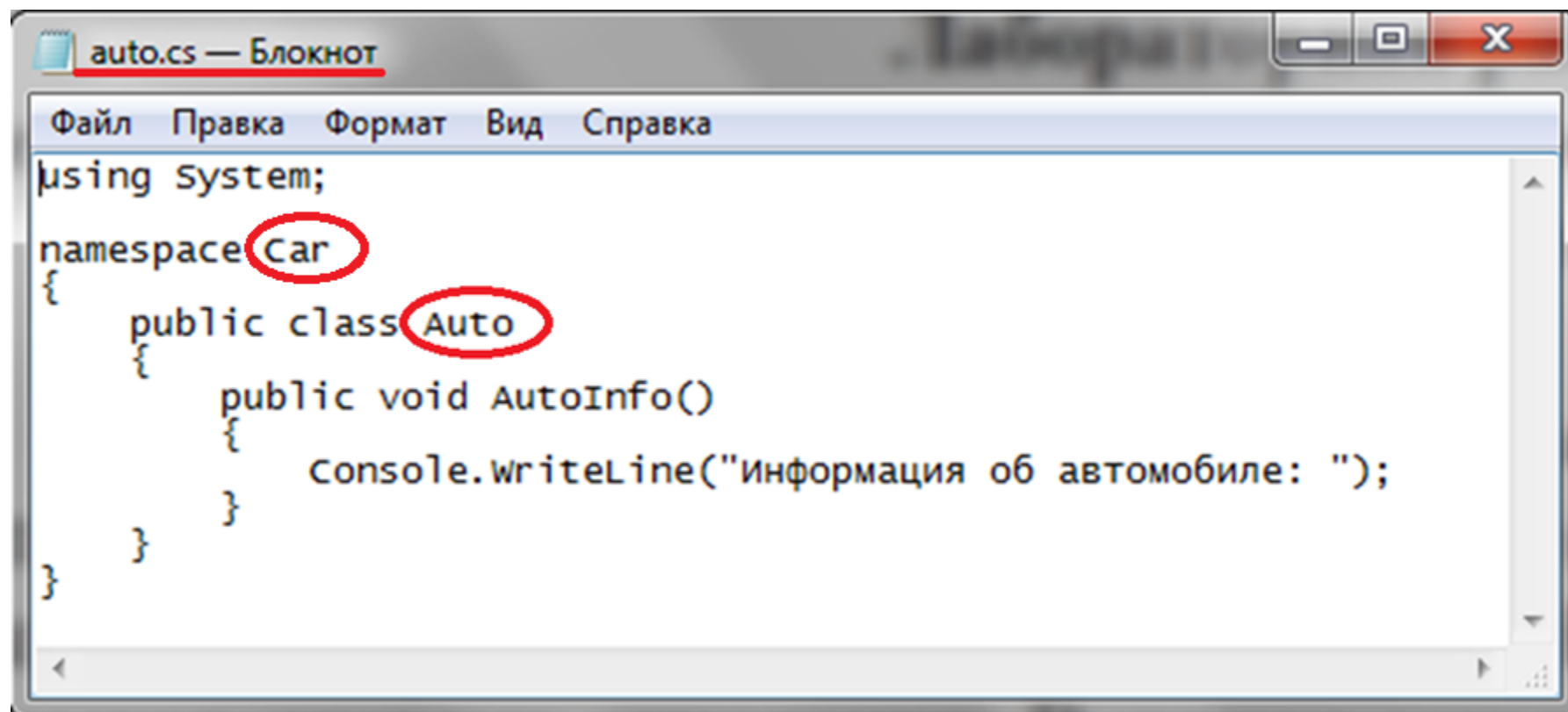
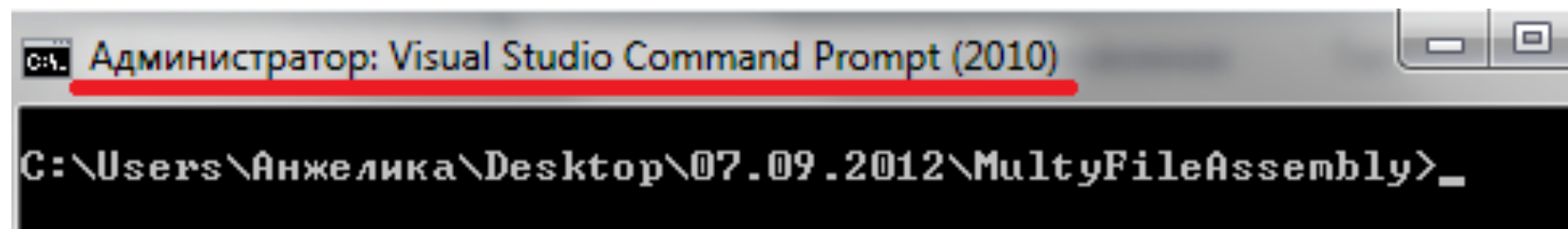


Многофайловые сборки

Многофайловые сборки

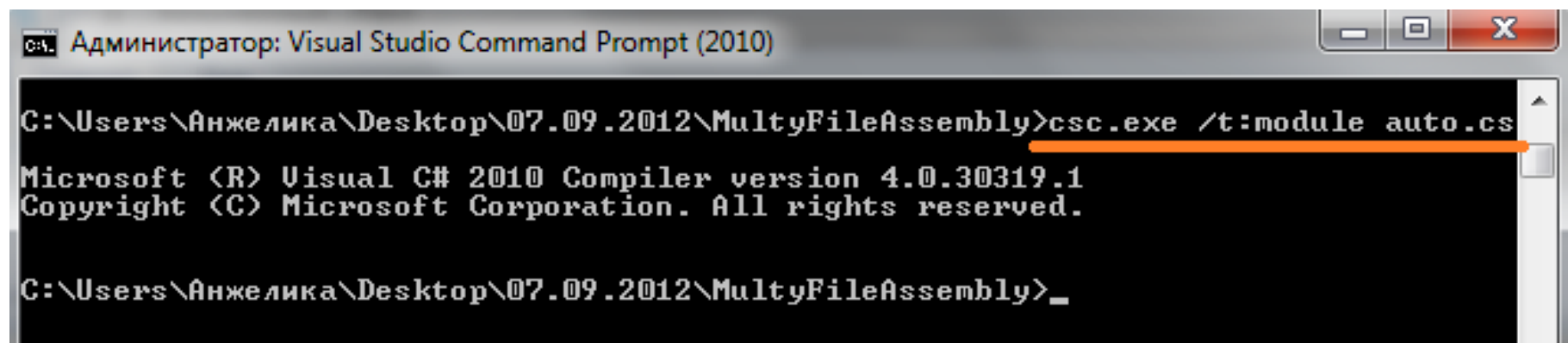


```
auto.cs — Блокнот
Файл  Правка  Формат  Вид  Справка
using System;
namespace Car
{
    public class Auto
    {
        public void AutoInfo()
        {
            Console.WriteLine("информация об автомобиле: ");
        }
    }
}
```



```
Администратор: Visual Studio Command Prompt (2010)
C:\Users\Ангелика\Desktop\07.09.2012\MultyFileAssembly>
```

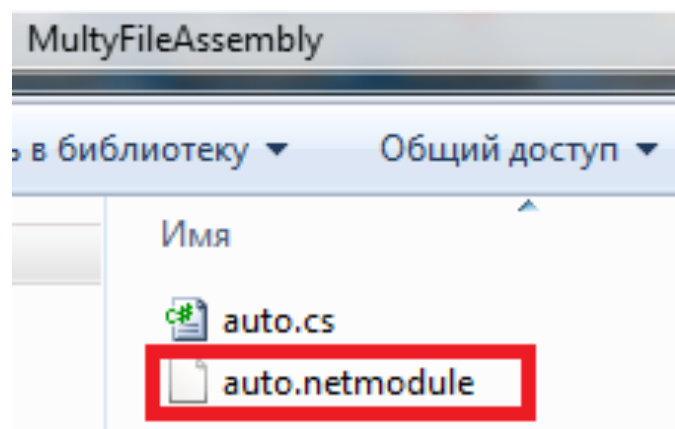
Многофайловые сборки



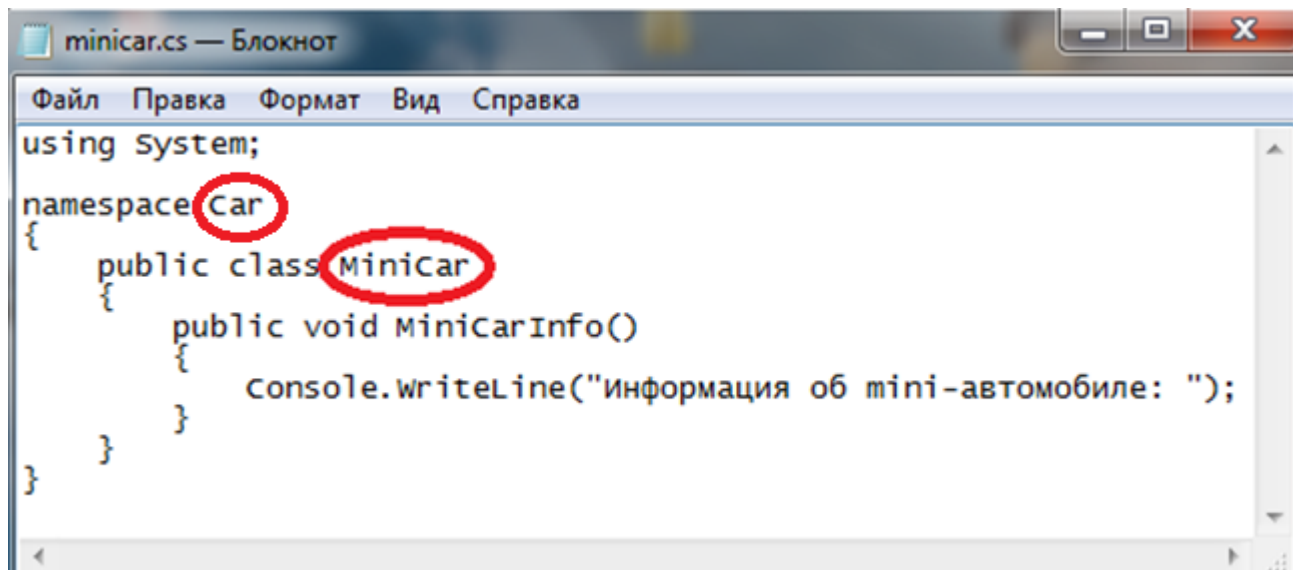
Администратор: Visual Studio Command Prompt (2010)

```
C:\Users\Ангелика\Desktop\07.09.2012\MultyFileAssembly>csc.exe /t:module auto.cs
Microsoft (R) Visual C# 2010 Compiler version 4.0.30319.1
Copyright (C) Microsoft Corporation. All rights reserved.

C:\Users\Ангелика\Desktop\07.09.2012\MultyFileAssembly>_
```

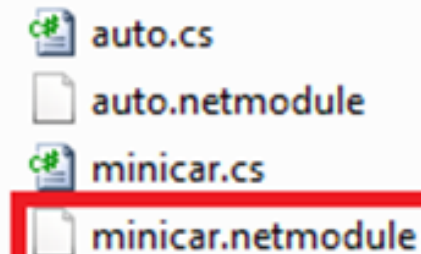


Многофайловые сборки

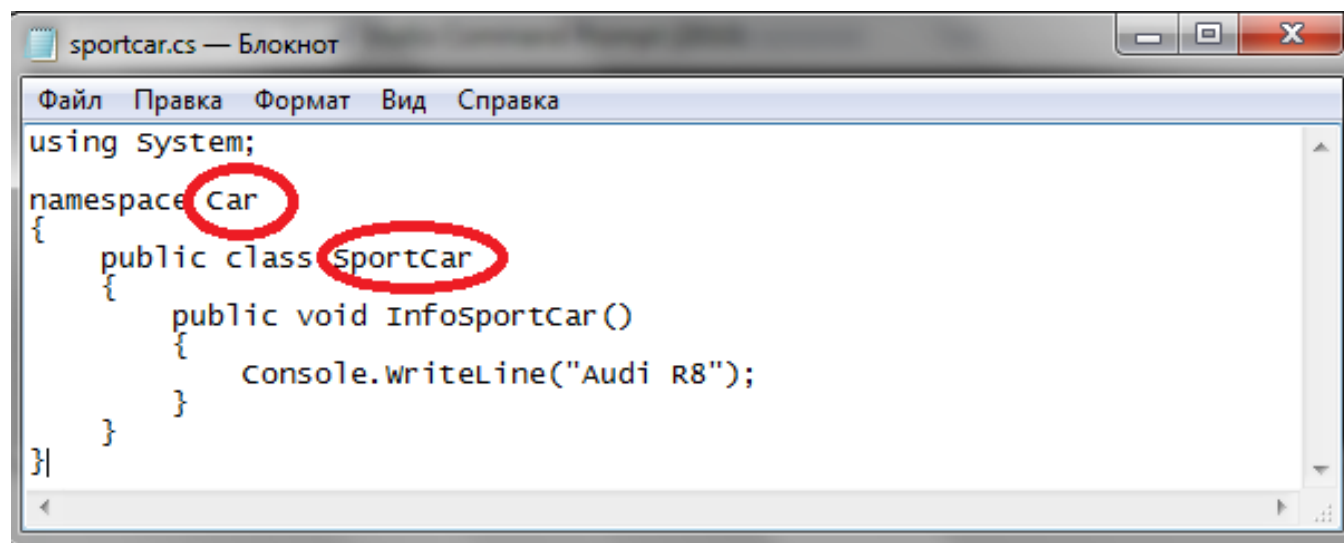


```
minicar.cs — Блокнот
Файл  Правка  Формат  Вид  Справка
using System;
namespace Car
{
    public class MiniCar
    {
        public void MinicarInfo()
        {
            Console.WriteLine("информация об mini-автомобиле: ");
        }
    }
}
```

```
C:\Users\Ангелика\Desktop\07.09.2012\MultyFileAssembly>csc.exe /t:module minicar
.cs
Microsoft (R) Visual C# 2010 Compiler version 4.0.30319.1
Copyright (C) Microsoft Corporation. All rights reserved.
```



Многофайловые сборки



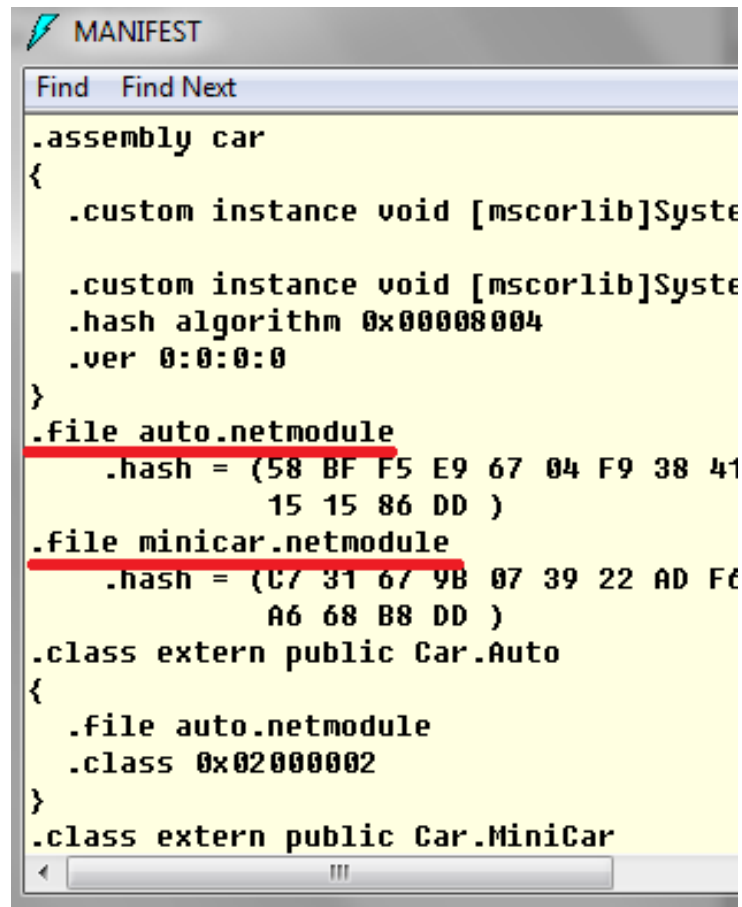
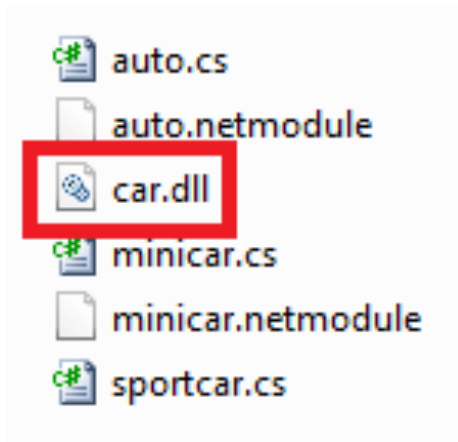
The screenshot shows a Notepad window titled "sportcar.cs — Блокнот". The menu bar includes "Файл", "Правка", "Формат", "Вид", and "Справка". The code is as follows:

```
using System;
namespace Car
{
    public class SportCar
    {
        public void InfoSportCar()
        {
            Console.WriteLine("Audi R8");
        }
    }
}
```

In the original image, the word "Car" in the namespace declaration and "SportCar" in the class declaration are circled in red.

```
C:\Users\Анжелика\Desktop\07.09.2012\MultyFileAssembly>csc /t:library /addmodule
:auto.netmodule /out:car.dll sportcar.cs
Microsoft (R) Visual C# 2010 Compiler version 4.0.30319.1
Copyright (C) Microsoft Corporation. All rights reserved.
```

Многофайловые сборки



Многофайловые сборки

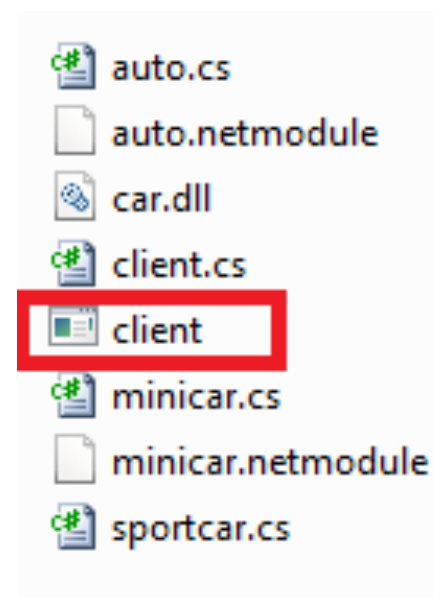
```
client.cs — Блокнот
Файл  Правка  Формат  Вид  Справка
using System;
using Car;

class Program
{
    static void Main()
    {
        Auto obj1 = new Auto();
        obj1.AutoIntro();

        SportCar obj = new SportCar();
        obj.InfoSportCar();

        MiniCar obj2 = new MiniCar();
        obj2.MiniCarIntro();

        Console.ReadLine();
    }
}
```



```
C:\Users\Ангелика\Desktop\07.09.2012\MultyFileAssembly>csc /r:car.dll client.cs
Microsoft (R) Visual C# 2010 Compiler version 4.0.30319.1
Copyright (C) Microsoft Corporation. All rights reserved.
```

Многофайловые сборки

```
C:\Users\Ангелика\Desktop\07.09.2012\MultyFileAssembly>client.exe
Информация об автомобиле:
Audi R8
Информация об mini-автомобиле:
```


Сборки со строгим
именем

Сборки со строгим именем

The image shows two screenshots of the Visual Studio IDE. The top screenshot displays the `Program.cs` file in the `ConsoleApplicationDemo` project. The code includes the `using ClassLibraryDemo;` statement and creates a `Book` object. The bottom screenshot displays the `Book.cs` file in the `ClassLibraryDemo` project, showing the `Book` class definition. Both the `using ClassLibraryDemo;` statement and the `Book` class name are highlighted with red boxes. The Solution Explorer on the right of each screenshot shows the project structure, with the `ClassLibraryDemo` project listed under the `References` folder. The bottom screenshot also shows the `SolutionDemoLibrary` project structure, with the `bin` folder expanded to show the `Debug` subfolder. The `ClassLibraryDemo.dll` file is highlighted with a red box in the `bin` folder.

```
Program.cs
using System;
using ClassLibraryDemo;

namespace ConsoleApplicationDemo
{
    class Program
    {
        static void Main(string[] args)
        {
            var book = new Book("Title1", "Author1");
            Console.WriteLine(book.ToString());
        }
    }
}
```

```
Book.cs
namespace ClassLibraryDemo
{
    public class Book
    {
        public int ID { get; set; }
        public string Title { get; set; }
        public string Author { get; set; }

        public Book(string title, string author)
        {
            Author = author;
            Title = title;
        }

        public override string ToString()
        {
            return string.Format("{0}, {1}", Title, Author);
        }
    }
}
```

Solution Explorer (Top):

- Solution 'SolutionDemoLibrary' (3 projects)
 - ConsoleApplicationDemo
 - References
 - ClassLibraryDemo
 - Microsoft.CSharp
 - System
 - System.Core
 - System.Data
 - System.Data.DataSetExtensions

Solution Explorer (Bottom):

- Solution 'ClassLibraryDemo' (2 projects)
 - ClassLibraryDemo
 - References
 - Book.cs

Solution Explorer (Bottom):

- SolutionDemoLibrary
 - ConsoleApplicationDemo
 - bin
 - Debug
 - ClassLibraryDemo.dll
 - ClassLibraryDemo
 - ConsoleApplicationDemo
 - ConsoleApplicationDemo.vshost
 - ConsoleApplicationDemo.vshost.exe.ma...

Сборки со строгим именем

```
C:\Users\Анжелика\Desktop\07.09.2012\MultyFileAssembly>sn.exe -k keypair.snk  
Microsoft (R) .NET Framework Strong Name Utility Version 4.0.30319.1  
Copyright (c) Microsoft Corporation. All rights reserved.  
Key pair written to keypair.snk
```

The screenshot shows the Visual Studio IDE with the **ClassLibraryDemoStrongName** project selected. The **Signing** tab is active in the Properties window, showing the **Sign the assembly** checkbox checked. The **Choose a strong name key file:** field is empty, and the **<Browse...>** button is highlighted with a red box. A context menu is open over the **keypair.snk** file in the Solution Explorer, with the **keypair.snk** item highlighted by a red box. The **Properties** button at the bottom of the context menu is also highlighted with a red box.

Application

Build

Build Events

Debug

Resources

Services

Settings

Reference Paths

Signing

Configuration: N/A Platform: N/A

☐ Sign the ClickOnce manifests

Certificate:

Issued To	(none)
Issued By	(none)
Intended Purpose	(none)
Expiration Date	(none)

Timestamp server URL:

☐ Sign the assembly

Choose a strong name key file:

<New...>
<Browse...>

When delay signed, the project will not run or be debuggable.

ClassLibraryDemoStrongName

Properties

References

Book.cs

keypair.snk

Alt+Enter

Сборки со строгим именем

.assembly ClassLibraryDemo

```
{
    .custom instance void [mscorlib]System.Reflection.AssemblyConfigurationAttribute::.ctor(string)
    .custom instance void [mscorlib]System.Reflection.AssemblyCompanyAttribute::.ctor(string)
    .custom instance void [mscorlib]System.Reflection.AssemblyProductAttribute::.ctor(string)

    .custom instance void [mscorlib]System.Runtime.CompilerServices.CompilationRelaxationsAttribute::.ctor(int)
    .custom instance void [mscorlib]System.Runtime.CompilerServices.RuntimeCompatibilityAttribute::.ctor()

    .custom instance void [mscorlib]System.Reflection.AssemblyCopyrightAttribute::.ctor(string)

    // --- The following custom attribute is added automatically, do not uncomment ---
    // .custom instance void [mscorlib]System.Diagnostics.DebuggableAttribute::.ctor(DebuggableAttribute.DebuggingModes)

    .custom instance void [mscorlib]System.Reflection.AssemblyTitleAttribute::.ctor(string)

    .custom instance void [mscorlib]System.Reflection.AssemblyDescriptionAttribute::.ctor(string)
    .custom instance void [mscorlib]System.Runtime.InteropServices.ComVisibleAttribute::.ctor(int)
    .custom instance void [mscorlib]System.Reflection.AssemblyTrademarkAttribute::.ctor(string)
    .custom instance void [mscorlib]System.Runtime.InteropServices.GuidAttribute::.ctor(Guid)

    .custom instance void [mscorlib]System.Reflection.AssemblyFileVersionAttribute::.ctor(string)
    .custom instance void [mscorlib]System.Runtime.Versioning.TargetFrameworkAttribute::.ctor(string)

    .custom instance void [mscorlib]System.Reflection.AssemblyInformationalVersionAttribute::.ctor(string)

    .custom instance void [mscorlib]System.Reflection.AssemblyMetadataAttribute::.ctor(string, string)

    .hash algorithm 0x00008004
    .ver 1:0:0:0
}
```

.assembly ClassLibraryDemoStrongName

```
{
    .custom instance void [mscorlib]System.Reflection.AssemblyConfigurationAttribute::.ctor(string)
    .custom instance void [mscorlib]System.Reflection.AssemblyCompanyAttribute::.ctor(string)
    .custom instance void [mscorlib]System.Reflection.AssemblyProductAttribute::.ctor(string)

    .custom instance void [mscorlib]System.Runtime.CompilerServices.CompilationRelaxationsAttribute::.ctor(int)
    .custom instance void [mscorlib]System.Runtime.CompilerServices.RuntimeCompatibilityAttribute::.ctor()

    .custom instance void [mscorlib]System.Reflection.AssemblyCopyrightAttribute::.ctor(string)

    // --- The following custom attribute is added automatically, do not uncomment ---
    // .custom instance void [mscorlib]System.Diagnostics.DebuggableAttribute::.ctor(DebuggableAttribute.DebuggingModes)

    .custom instance void [mscorlib]System.Reflection.AssemblyTitleAttribute::.ctor(string)

    .custom instance void [mscorlib]System.Reflection.AssemblyDescriptionAttribute::.ctor(string)
    .custom instance void [mscorlib]System.Runtime.InteropServices.ComVisibleAttribute::.ctor(int)
    .custom instance void [mscorlib]System.Reflection.AssemblyTrademarkAttribute::.ctor(string)
    .custom instance void [mscorlib]System.Runtime.InteropServices.GuidAttribute::.ctor(Guid)

    .custom instance void [mscorlib]System.Reflection.AssemblyFileVersionAttribute::.ctor(string)
    .custom instance void [mscorlib]System.Runtime.Versioning.TargetFrameworkAttribute::.ctor(string)

    .custom instance void [mscorlib]System.Reflection.AssemblyInformationalVersionAttribute::.ctor(string)

    .custom instance void [mscorlib]System.Reflection.AssemblyMetadataAttribute::.ctor(string, string)

    .publickey = (00 24 00 00 04 80 00 00 94 00 00 00 06 02 00 00 // $.
                  00 24 00 00 52 53 41 31 00 04 00 00 01 00 01 00 // $.RSA1.
                  F9 50 83 BB C8 D4 75 92 4B A8 9F 38 16 2D DC 42 // .P...u.K..8.-.B
                  03 70 1A 8A D2 3B B7 EE C3 36 7A 88 BD 22 E9 96 // .p...;...6z..".
                  E6 CB AF 81 BF D5 A4 BE 2F 94 7B 87 0C 73 56 33 // ...../.{..sU3
                  42 85 39 D1 87 57 3D 30 02 4E 2A A9 99 C4 17 DF // B.9..W=0.N*....
                  9A 78 C7 E6 06 4F 55 43 61 3B 28 F2 C3 EE 7A 28 // .x...OUCa;(;..z(
                  79 AD 3A BC ED 85 F7 B6 0F 55 C4 66 18 00 55 FD // y:.....U.f..U.
                  E5 DA E7 B9 22 2B D6 9E 4C A8 FE 7F 07 3C C4 2C // ...."+..L....<.,
                  86 EB C7 71 EB 26 85 A4 A4 32 92 27 50 AE 40 C1 ) // ...q.&...2.'P.@.

    .hash algorithm 0x00008004
    .ver 1:0:0:0
}
```

Сборки со строгим именем

```
C:\Users\Ангелика\Desktop\07.09.2012\ClassLibraryDemo\ClassLibraryDemoStrongName\bin\Debug>gacutil -i ClassLibraryDemoStrongName.dll
Microsoft (R) .NET Global Assembly Cache Utility. Version 4.0.30319.1
Copyright (c) Microsoft Corporation. All rights reserved.

Assembly successfully added to the cache
```

Компьютер > Windows7_OS (C:) > Windows > Microsoft.NET > assembly > GAC_MSIL

Имя	Дата изменения	Тип
Accessibility	12.08.2012 20:38	Папка
AspNetMMCEExt	12.08.2012 20:42	Папка
ClassLibraryDemoStrongName	04.09.2012 16:48	Папка
CppCodeProvider	13.08.2012 12:29	Папка
FSharp.Compiler	13.08.2012 12:29	Папка
FSharp.Compiler.Interactive.Settings	13.08.2012 12:29	Папка
FSharp.Compiler.Server.Shared	13.08.2012 12:29	Папка
FSharp.Core	06.08.2012 13:15	Папка

Компьютер > Windows7_OS (C:) > Windows > Microsoft.NET > assembly > GAC_MSIL > ClassLibraryDemoStrongName > v4.0_1.0.0.0_fdd254cb694e5165

Имя	Дата изменения	Тип	Размер
ClassLibraryDemoStrongName.dll	04.09.2012 16:48	Расширение при...	5 КБ

Сборки со строгим именем

Program.cs* x Program.cs

ConsoleApplicationDemoGAC.Prog Main(string[] args)

```
using System;
using ClassLibraryDemoStrongName;

namespace ConsoleApplicationDemoGAC
{
    class Program
    {
        static void Main(string[] args)
        {
            var book = new Book("Title1", "Author1");
            Console.WriteLine(book.ToString());
            Console.ReadKey();
        }
    }
}
```

Solution Explorer

Solution 'SolutionDemoLibrary' (4 projects)

- ConsoleApplicationDemo
- ConsoleApplicationDemoGAC
 - Properties
 - References
 - ClassLibraryDemoStrongName
 - Microsoft.CSharp
 - System
 - System.Core
 - System.Data
 - System.Data.DataSetExtensions
 - System.Xml
 - System.Xml.Linq

Program.cs

07.09.2012 ▸ SolutionDemoLibrary ▸ ConsoleApplicationDemoGAC ▸ bin ▸ Debug

Добавить в библиотеку ▾ Общий доступ ▾ Новая папка			
Имя	Дата изменения	Тип	
ConsoleApplicationDemoGAC	04.09.2012 16:59	Приложение	
ConsoleApplicationDemoGAC	04.09.2012 16:59	Программа	