**Задача 11:** Опишете разликите между C# и .NET Framework.

* What is C#?

**C#** (pronounced *see sharp*) is a [multi-paradigm programming language](http://en.wikipedia.org/wiki/Multi-paradigm_programming_language" \o "Multi-paradigm programming language) encompassing [strong typing](http://en.wikipedia.org/wiki/Strong_typing" \o "Strong typing), [imperative](http://en.wikipedia.org/wiki/Imperative_programming), [declarative](http://en.wikipedia.org/wiki/Declarative_programming), [functional](http://en.wikipedia.org/wiki/Functional_programming), [generic](http://en.wikipedia.org/wiki/Generic_programming), [object-oriented](http://en.wikipedia.org/wiki/Object-oriented_programming) ([class-based](http://en.wikipedia.org/wiki/Class_(computer_science))), and [component-oriented](http://en.wikipedia.org/wiki/Component-based_software_engineering) programming disciplines. It was developed by [Microsoft](http://en.wikipedia.org/wiki/Microsoft) within its [.NET](http://en.wikipedia.org/wiki/.NET_Framework) initiative and later approved as a standard by [Ecma](http://en.wikipedia.org/wiki/Ecma_International" \o "Ecma International) (ECMA-334) and [ISO](http://en.wikipedia.org/wiki/International_Organization_for_Standardization) (ISO/IEC 23270:2006). C# is one of the programming languages designed for the [Common Language Infrastructure](http://en.wikipedia.org/wiki/Common_Language_Infrastructure" \o "Common Language Infrastructure).

C# is intended to be a simple, modern, general-purpose, object-oriented programming language.[[6]](http://en.wikipedia.org/wiki/C_Sharp_(programming_language)#cite_note-ECMA-334-6) Its development team is led by [Anders Hejlsberg](http://en.wikipedia.org/wiki/Anders_Hejlsberg" \o "Anders Hejlsberg). The most recent version is [C# 4.0](http://en.wikipedia.org/wiki/C_Sharp_4.0), which was released on April 12, 2010.

* What is .NET Framework?

The **.NET Framework** (pronounced *dot net*) is a [software framework](http://en.wikipedia.org/wiki/Software_framework" \o "Software framework) that runs primarily on [Microsoft Windows](http://en.wikipedia.org/wiki/Microsoft_Windows). It includes a large [library](http://en.wikipedia.org/wiki/Base_Class_Library" \o "Base Class Library) and provides language interoperability (each language can use code written in other languages) across several [programming languages](http://en.wikipedia.org/wiki/Programming_language" \o "Programming language). Programs written for the .NET Framework execute in a [software](http://en.wikipedia.org/wiki/Software" \o "Software) environment (as contrasted to [hardware](http://en.wikipedia.org/wiki/Hardware" \o "Hardware) environment), known as the [Common Language Runtime](http://en.wikipedia.org/wiki/Common_Language_Runtime" \o "Common Language Runtime) (CLR), an [application virtual machine](http://en.wikipedia.org/wiki/Virtual_machine" \l "Process_virtual_machines" \o "Virtual machine) that provides important services such as security, [memory management](http://en.wikipedia.org/wiki/Memory_management" \o "Memory management), and [exception handling](http://en.wikipedia.org/wiki/Exception_handling" \o "Exception handling). The class library and the CLR together constitute the .NET Framework.

The .NET Framework's [Base Class Library](http://en.wikipedia.org/wiki/Base_Class_Library" \o "Base Class Library) provides [user interface](http://en.wikipedia.org/wiki/User_interface" \o "User interface), [data access](http://en.wikipedia.org/wiki/Data_access" \o "Data access), [database connectivity](http://en.wikipedia.org/wiki/Database_connection" \o "Database connection), [cryptography](http://en.wikipedia.org/wiki/Cryptography" \o "Cryptography), [web application](http://en.wikipedia.org/wiki/Web_application" \o "Web application) development, numeric [algorithms](http://en.wikipedia.org/wiki/Algorithm" \o "Algorithm), and [network communications](http://en.wikipedia.org/wiki/Computer_networking" \o "Computer networking). Programmers produce software by combining their own [source code](http://en.wikipedia.org/wiki/Source_code" \o "Source code) with the .NET Framework and other libraries. The .NET Framework is intended to be used by most new applications created for the Windows platform. Microsoft also produces a popular [integrated development environment](http://en.wikipedia.org/wiki/Integrated_development_environment" \o "Integrated development environment) largely for .NET software called [Visual Studio](http://en.wikipedia.org/wiki/Microsoft_Visual_Studio" \o "Microsoft Visual Studio).

**Sources:**

<http://en.wikipedia.org/wiki/.NET_Framework>

<http://en.wikipedia.org/wiki/C_Sharp_(programming_language)>