Homework from lecture 01 (29.10.2013) – Introduction to Programming

1. Find information about Consloe.WriteLine() method.

Here is a Link to MSDN (Microsoft Developer Network).

http://msdn.microsoft.com/en-us/library/system.console.writeline%28v=vs.110%29.aspx

The definition of the method **WriteLine()** by **MSDN** is – "Writes the specified data, followed by the current line terminator, to the standard output stream." From what I understand (in other words) this means that this method displays the data you've typed in the brackets () onto the console and then it jumps to a new line.

10. Provide a short list with information about the most popular programming languages. How do they differ from C#?

C is a general purpose programming language initially developed by Dennis Ritchie between 1969 and 1973 at AT&T Bell Labs. Its design provides constructs that map efficiently to typical machine instructions, and therefore it has found lasting use in applications that had formerly been coded in assembly language, most notably system software. It is intended for system use.

C++ is general purpose, statically typed, free-form, multi-paradigm and compiled programing language. It is regarded as an intermediate-level language, as it comprises both high-level and low-level language features. It is intended for application and system use.

C# is intended to be a simple, modern, general-purpose, object-oriented high-level programming language. It is intended for application, business, client-side, general, server-side, Web, and other use.

Java is concurrent, class-based, object-oriented computer language specifically designed to have as few implementation dependencies as possible. It is intended to let application developers write once, run anywhere (WORA), meaning that code that runs on one platform does not need to be recompiled to run on another. It is intended for application, business, client-side, general, server-side and web use.

JavaScript is a prototype-based scripting language with dynamic typing and has first-class functions. It is a multi-paradigm language, supporting object-oriented, imperative, and functional programming styles. It is intended for client-side, server-side and web use.

Visual Basic is a third-generation event-driven programming language. Microsoft intentions were to be relatively easy to learn and use. It enables the rapid application development (RAD) of graphical user interface (GUI) applications, access to databases using Data Access Objects, Remote Data Objects, or ActiveX Data Objects, and creation of ActiveX controls and objects. It is intended for application and educational use.

PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language.

In comparison with languages like **Java** and **JavaScript**, the **C#** is not an open-source language and it is not open to third parties. Also **C#** is undisputedly the better, more powerful, richer and better engineered language than **Java**. In comparison with **C** and **C++**, **C#** is very simple and easy to learn while widely spread in the industry making it extremely popular. **C** and **C++** languages

are considered rather primitive, old and decaying. **PHP** is suitable for developing small projects and can easily lead developers to bad, disorganized and hard to maintain code when it comes to big and complicated software systems. It is a language that tends towards low-quality programming.

11. Describe the difference between C# and .NET Framework.

In short, **.NET Framework** is the platform behid **C#**. The **.NET Framework** includes the language **C#** itself as well as other **.NET** languages, the environment for development and execution of programs written in **C#,** and a set of standard libraries. The **.NET Framework** is part of every modern Window distribution.

For tasks 2, 3, 4, 6, 7, 8, 9, 12

You can find the solutions by opening the file "Homework from lecture 01 - 29.10.2013.sln" in the folder "HW C# projects". Thank you.