The most popular languages used in the programming field are: Java, C++, PHP, JavaScript..

**Comparisons**

**C#/Java**

1) **C#:** Methods are non – virtual by default  
 **Java:** Methods are virtual by default.

2) **C#:** Supports generator methods  
 **Java:** No support for generator methods

3) **C#:** Supports partial methods with restrictions  
 **Java:** No support for partial methods

4) **C#:** Supports extension methods  
 **Java:** No support for extension methods

5) **C#:** Supports conditional methods  
 **Java:** Limited support for conditional methods

**C# /JavaScript**

 1) **Ease of creating user controls:**  Creating user controls using Managed code is relatively easy as compared to creating it in Javscript.

2) **Resuablity:** Code written in Managed code can be compiled in to a dll and can be used in multiple projects. So reusability of code can be better done using Managed code.

 3) **Maintainability and modularity:** Managed code can be modularized better and thus becomes more manageable as compared to JavaScript.  Apart from other there is not any functionality wise difference between JavaScriptand ManagedCode. People can develop same functionality using JavaScriptas ManagedCode like C #/VB.Net cando.

**C#/C++**

1) Value types and reference types exist (structis value - type, classis reference - type)

2) Value types live on the stack, reference types on the heap

3) References can point to null (must not be valid)

4) Code is packaged in as semblies in C#

5) No automatic conversion from int to boolin C#

6) Main – function is called Main in C#

7) No semicolon after a class declaration in C#

\*) Everything derives from objector can betreated as if

**C#/PHP**

1) C# is just a programming language as PHP is, but with the difference that C# targets a platform (.NET) that also accepts other languages, including PHP

2) Depending on your needs PHP could be good enough but for high – end solutions, the .NET platform has more robustness.

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

VisualBasic .NET is a true object- oriented programming language tha tincludes new and improved features such as inheritance, polymorphism, interfaces, andoverloading. Both VisualBasic .NET and Visual C# .NET use the common language runtime. Visual C# .NET may have a few more "power" features such as handling unmanaged code, and VisualBasic .NET may be skewed a little to wardease of use by providing features such as latebinding.