Integrated Development Environment (IDE)

An **Integrated Development Environment (IDE)** is a software suite that consolidates basic tools required to write and test software.

.Net Framework (Pre-requisite)

The .Net framework is a revolutionary platform that helps you to write the following types of applications –

- Windows applications
- Web applications
- Web services

The .Net framework applications are multi-platform applications. The framework has been designed in such a way that it can be used from any of the following languages: C#, C++, Visual Basic, Jscript, COBOL, etc. All these languages can access the framework as well as communicate with each other.

The .Net framework consists of an enormous library of codes used by the client languages such as C#. Following are some of the components of the .Net framework

- Common Language Runtime (CLR)
- The .Net Framework Class Library
- Common Language Specification
- Common Type System
- Metadata and Assemblies
- Windows Forms
- ASP.Net and ASP.Net AJAX
- ADO.Net
- Windows Workflow Foundation (WF)
- Windows Presentation Foundation
- Windows Communication Foundation (WCF)
- LINQ

SharpDevelop 5.1

It is a free and open source integrated development environment for the .NET Framework, Mono, Gtk# and Glade# platforms. It supports development in C#, Visual Basic .NET, Boo, F#, IronPython and IronRuby programming languages.



Picture 1. The interface of SharpDevelop 5.1 (Windows Application)