C# DataTypes

Data Types in a programming language describes that what type of data a variable can hold. CSharp is a strongly typed language, therefore every variable and object must have a declared type. The CSharp type system contains three Type categories. They are Value Types, Reference Types and Pointer Types. In CSharp it is possible to convert a value of one type into a value of another type. The operation of Converting a Value Type to a Reference Type is called Boxing and the reverse operation is called Unboxing.

When we declare a variable, we have to tell the compiler about what type of the data the variable can hold or which data type the variable belongs to.

Syntax

DataType: The type of data that the variable can hold

VariableName: the variable we declare for hold the values.

Example

int: is the data type

count: is the variable name

The above example shows, declare a variable 'count' for holding an integer values.

The following are the commonly using datatypes in C#.

bool

The bool keyword is an alias of System.Boolean. It is used to declare variables to store the Boolean values, true and false. In C#, there is no conversion between the bool type and other types.

C# Runtime type : System.Boolean

CSharp declaration : bool flag; CSharp Initialization : flag = true;

CSharp default initialization value: false