c#

28 February 2024

08:22

W3School

* Using System; //python and java has import

------------------------------------

using System;

namespace HelloWorld

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Hello World!");

}

}

}

------------------------------------------

* Visual studio for development
* Console.write() //same as writeLine without \n
* Comments : same as c++ and java
* Variable: int , long, float, char, double, string , bool
* Const keyword for constant
* Cast : (int), Convert.ToString(5)
* Input : console.Readline()
* Operator : same a c++
* Math class: Max, Min, Sqrt, Abs,Round
* Formatted string : $"My name is {firstName} {lastName}"
* if, else , ?: : same as java , c++
* Switch , break, continue, loops : same as c++, java
  + One extra loop : foreach( string I in cars)
* Array: string[] arrCars; same as java
  + int[,]numbers ={{1,4,2},{3,6,8}};
  + numbers[0,0]=5;
* It also support named argument as python in methods
* Access specifier

|  |  |
| --- | --- |
| public | The code is accessible for all classes |
| private | The code is only accessible within the same class |
| protected | The code is accessible within the same class, or in a class that is inherited from that class. You will learn more about [inheritance](https://www.w3schools.com/cs/cs_inheritance.php) in a later chapter |
| internal | The code is only accessible within its own assembly, but not from another assembly. You will learn more about this in a later chapter |

* To define getter and setter : create field as private and property with get; set as public

---------------------

class Person

{

private string name; // field

public string Name // property

{

get { return name; } // get method

set { name = value; } // set method

}

}

---------------------------------------------

* Inheriatnce : class Car:Vehicle
* Use sealed keyword to stop class from inherit
* Use virtual and override keyword to support runtime polymorphism(java does not require virtual etc keyword)
* Abstract, interface keyword same as java
* Try catch throw finally : same as c++