MINICURSO C# PET CC

DIA 1

.NET FRAMEWORK

.NET is an open source developer platform
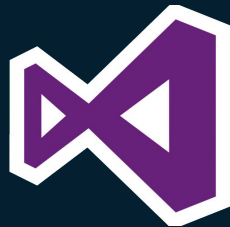
Linguagens .NET

Visual Basic   **C#**   **F#**

IDE
VISUAL STUDIO

Codifique mais rápido. Trabalhe com mais inteligência.

.NET CONF 2019

23 à 25 de Setembro

Lançamento do .NET Core 3.0

A LINGUAGEM C#

C Sharp, sinal músical sustenido

Informações Gerais

› Mantida pela Microsoft;
› Multiparadigma;
› Criador: Anders Hejlsberg;
› Common Intermediate Language;
› Common Language Runtime;
› Common Language Infrastructure;

Keywords Java x C#

Java	C#	Java	C#
abstract	abstract	native	extern
assert	Debug.Assert (*method*)	new	new
break	break	null	null
case	case	package	namespace
catch	catch	private	private
class	class	protected	internal
const	const	public	public
continue	continue	return	return
default	default	static	static

Java	C#	Java	C#
do	do	strictfp	n/a
else	else	super	base
enum	enum	switch	switch
extends	:	synchronized	lock
false	false	this	this
final	sealed	throw	throw
finally	finally	throws	n/a
for	for / foreach	transient	[Nonserialized] (attribute)
goto	goto	true	true
if	if	try	try
implements	:	… (varargs)	params
import	using	void	void
instanceof	is	volatile	volatile
interface	interface	while	while

Java	C#	Java Range	C# Range
boolean	bool	true of false	true/false
byte	sbyte	-128 to 127	-128 to 127
char	char	0 to $2^{16} - 1$	0 to $2^{16} - 1$
double	double	$\pm 5.0 \times 10^{-324}$ to $\pm 1.7 \times 10^{308}$	$\pm 5.0 \times 10^{-324}$ to $\pm 1.7 \times 10^{308}$
float	float	$\pm 1.5 \times 10^{45}$ to $\pm 3.4 \times 10^{38}$	$\pm 1.5 \times 10^{45}$ to $\pm 3.4 \times 10^{38}$
int	int	2^{31} to $2^{31}-1$	-2^{31} to $2^{31}-1$
long	long	-2^{63} to $2^{63}-1$	-2^{63} to $2^{63}-1$
short	short	-2^{15} to $2^{15}-1$	-2^{15} to $2^{15}-1$
String	string	*n/a*	*n/a*
Object	object	*n/a*	*n/a*
Date	DateTime	1st Jan 1970 to *implementation dependent value*	1st Jan 0001 to 31st Dec 9999

Array examples

Java	C#
`int[] data1;`	`int[] data1;`
`int data2[];`	`n/a`

C# datatypes not provided as part of Java

Type	Range	Size(bits)
decimal	28-29 significant figures	128
byte	0 to 255	8
uint	$2^{32}-1$	32
ulong	0 to $2^{64}-1$	64
ushort	0 to $2^{16}-1$	16

Links úteis:

› **http://www.myw0.com/2014/3963/c-cheat-sheet-for-java-developers**

› **https://dotnet.microsoft.com/learn**

› **https://www.tutorialspoint.com/csharp/index.htm**

› **https://www.caelum.com.br/apostila-csharp-orientacao-objetos/**