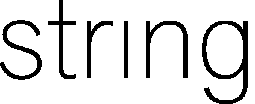
**C# String Functions And Properties**

 **In this chapter you will learn**

* What is string?
* How many types of string function in C#?
* How to use C# string function in programming?
* What is the difference between string and String?

In C# programming, **string**is another kind of data type that represents Unicode Characters. It is the alias of System.String, however, you can also write System.String instead of a string. It is the sequence of character in which each character is a Unicode character.

There is no difference between string and String because a string is the alias of System.String. Most of the developers get confused what to use between sting and String. Technically there is no difference between them and they can use any of them. However, you will have to use “using System” to use the String in C#. Another difference is String is a class name whereas a string is a reserved keyword. You should always use string instead of String.

**C# STRING FUNCTION**

|  |  |
| --- | --- |
| String Functions | Definitions |
| Clone() | Make clone of string. |
| CompareTo() | Compare two strings and returns integer value as output. It returns 0 for true and  1 for false. |
| Contains() | The C# Contains method checks whether specified character or string is exists or not  in the string value. |
| EndsWith() | This EndsWith Method checks whether specified character is the last character of  string or not. |
| Equals() | The Equals Method in C# compares two string and returns Boolean value as output. |
| GetHashCode() | This method returns HashValue of specified string. |
| GetType() | It returns the System.Type of current instance. |
| GetTypeCode() | It returns the Stystem.TypeCode for class System.String. |
| IndexOf() | Returns the index position of first occurrence of specified character. |
| ToLower() | Converts String into lower case based on rules of the current culture. |
| ToUpper() | Converts String into Upper case based on rules of the current culture. |
| Insert() | Insert the string or character in the string at the specified position. |
| IsNormalized() | This method checks whether this string is in Unicode normalization form C. |
| LastIndexOf() | Returns the index position of last occurrence of specified character. |
| Length | It is a string property that returns length of string. |
| Remove() | This method deletes all the characters from beginning to specified index position. |
| Replace() | This method replaces the character. |
| Split() | This method splits the string based on specified value. |
| StartsWith() | It checks whether the first character of string is same as specified character. |
| Substring() | This method returns substring. |
| ToCharArray() | Converts string into char array. |
| Trim() | It removes extra whitespaces from beginning and ending of string. |

Example:

using System.Text;

class Program

{

static void Main(string[] args)

{

string firstname;

string lastname;

firstname = "Steven Clark";

lastname = "Clark";

Console.WriteLine(firstname.Clone());

// Make String Clone

Console.WriteLine(firstname.CompareTo(lastname));

//Compare two string value and returns 0 for true and 1 for false

Console.WriteLine(firstname.Contains("ven")); //Check whether specified value exists or not in //string

Console.WriteLine(firstname.EndsWith("n")); //Check whether specified value is the last //character of string

Console.WriteLine(firstname.Equals(lastname));

//Compare two string and returns true and false

Console.WriteLine(firstname.GetHashCode());

//Returns HashCode of String

Console.WriteLine(firstname.GetType());

//Returns type of string

Console.WriteLine(firstname.GetTypeCode());

//Returns type of string

Console.WriteLine(firstname.IndexOf("e")); //Returns the first index position of specified //value the first index position of specified value

Console.WriteLine(firstname.ToLower());

//Covert string into lower case

Console.WriteLine(firstname.ToUpper());

//Convert string into Upper case

Console.WriteLine(firstname.Insert(0, "Hello")); //Insert substring into string

Console.WriteLine(firstname.IsNormalized());

//Check Whether string is in Unicode normalization from C

Console.WriteLine(firstname.LastIndexOf("e")); //Returns the last index position of specified //value

Console.WriteLine(firstname.Length);

//Returns the Length of String

Console.WriteLine(firstname.Remove(5));

//Deletes all the characters from beginning to specified index.

Console.WriteLine(firstname.Replace('e','i')); // Replace the character

string[] split = firstname.Split(new char[] { 'e' }); //Split the string based on specified value

Console.WriteLine(split[0]);

Console.WriteLine(split[1]);

Console.WriteLine(split[2]);

Console.WriteLine(firstname.StartsWith("S")); //Check whether first character of string is same //as specified value

Console.WriteLine(firstname.Substring(2,5));

//Returns substring

Console.WriteLine(firstname.ToCharArray());

//Converts an string into char array.

Console.WriteLine(firstname.Trim());

//It removes starting and ending white spaces from string

} //end of Main

} //end of class Program

**OUTPUT**

**Steven** **Clark**

1

True

False

False

1470518261

**System**.**String**

**String**

2

steven clark

STEVEN CLARK

**HelloSteven** **Clark**

True

4

12

**Steve**

**Stivin** **Clark**

**St**

v

n **Clark**

True

even

**Steven** **Clark**

**Steven** **Clark**

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