## **Methods of C# string**

**(Методи рядка C#)**

#### **Constructor (Конструктори)**

| **Constructor** | **Description** |
| --- | --- |
| **String(Char\*)** | Initializes a new instance of the String class to the value indicated by a specified pointer to an array of Unicode characters. |
| **String(Char\*, Int32, Int32)** | Initializes a new instance of the String class to the value indicated by a specified pointer to an array of Unicode characters, a starting character position within that array, and a length. |
| **String(Char, Int32)** | Initializes a new instance of the String class to the value indicated by a specified Unicode character repeated a specified number of times. |
| **String(Char[])** | Initializes a new instance of the String class to the value indicated by an array of Unicode characters. |
| **String(Char[], Int32, Int32)** | Initializes a new instance of the String class to the value indicated by an array of Unicode characters, a starting character position within that array, and a length. |
| **String(SByte\*)** | Initializes a new instance of the String class to the value indicated by a pointer to an array of 8-bit signed integers. |
| **String(SByte\*, Int32, Int32)** | Initializes a new instance of the String class to the value indicated by a specified pointer to an array of 8-bit signed integers, a starting position within that array, and a length. |
| **String(SByte\*, Int32, Int32, Encoding)** | Initializes a new instance of the String class to the value indicated by a specified pointer to an array of 8-bit signed integers, a starting position within that array, a length, and an Encoding object. |

**Property (Властивості)**

| **Property** | **Description** |
| --- | --- |
| **Chars[Int32]** | Gets the Char object at a specified position in the current String object. |
| **Length** | Gets the number of characters in the current String object. |

**Method (Методи)**

| **Method** | **Description** |
| --- | --- |
| **Clone()** | Returns a reference to this instance of String. |
| **Compare()** | Used to compare the two string objects. |
| **CompareOrdinal(String, Int32, String, Int32, Int32)** | Compares substrings of two specified String objects by evaluating the numeric values of the corresponding Char objects in each substring. |
| **CompareOrdinal(String, String)** | Compares two specified String objects by evaluating the numeric values of the corresponding Char objects in each string. |
| **CompareTo()** | Compare the current instance with a specified Object or String object. |
| **Concat()** | Concatenates one or more instances of String, or the String representations of the values of one or more instances of Object. |
| **Contains(String)** | Returns a value indicating whether a specified substring occurs within this string. |
| **Copy(String)** | Creates a new instance of String with the same value as a specified String. |
| **CopyTo(Int32, Char[], Int32, Int32)** | Copies a specified number of characters from a specified position in this instance to a specified position in an array of Unicode characters. |
| **EndsWith()** | Determines whether the end of this string instance matches a specified string. |
| **Equals()** | Determines whether two String objects have the same value. |
| **Format()** | Converts the value of objects to strings based on the formats specified and inserts them into another string. |
| **GetEnumerator()** | Retrieves an object that can iterate through the individual characters in this string. |
| **GetHashCode()** | Returns the hash code for this string. |
| **GetType()** | Gets the Type of the current instance.  (Inherited from Object) |
| **GetTypeCode()** | Returns the TypeCode for class String. |
| **IndexOf()** | Reports the zero-based index of the first occurrence of a specified Unicode character or string within this instance. The method returns -1 if the character or string is not found in this instance. |
| **IndexOfAny()** | Reports the index of the first occurrence in this instance of any character in a specified array of Unicode characters. The method returns -1 if the characters in the array are not found in this instance. |
| **Insert(Int32, String)** | Returns a new string in which a specified string is inserted at a specified index position in this instance. |
| **Intern(String)** | Retrieves the system’s reference to the specified String. |
| **IsInterned(String)** | Retrieves a reference to a specified String. |
| **IsNormalized()** | Indicates whether this string is in a particular Unicode normalization form. |
| **IsNullOrEmpty(String)** | Indicates whether the specified string is null or an Empty string. |
| **IsNullOrWhiteSpace(String)** | Indicates whether a specified string is null, empty, or consists only of white-space characters. |
| **Join()** | Concatenates the elements of a specified array or the members of a collection, using the specified separator between each element or member. |
| **LastIndexOf()** | Reports the zero-based index position of the last occurrence of a specified Unicode character or string within this instance. The method returns -1 if the character or string is not found in this instance. |
| **MemberwiseClone()** | Creates a shallow copy of the current Object.  (Inherited from Object) |
| **Normalize()** | Returns a new string whose binary representation is in a particular Unicode normalization form. |
| **PadLeft()** | Returns a new string of a specified length in which the beginning of the current string is padded with spaces or with a specified Unicode character. |
| **PadRight()** | Returns a new string of a specified length in which the end of the current string is padded with spaces or with a specified Unicode character. |
| **Remove()** | Returns a new string in which a specified number of characters from the current string are deleted. |
| **Replace()** | Returns a new string in which all occurrences of a specified Unicode character or String in the current string are replaced with another specified Unicode character or String. |
| **Split()** | Returns a string array that contains the substrings in this instance that are delimited by elements of a specified string or Unicode character array. |
| **StartsWith(String)** | Determines whether the beginning of this string instance matches a specified string. |
| **Substring(Int32)** | Retrieves a substring from this instance. |
| **ToCharArray()** | Copies the characters in this instance to a Unicode character array. |
| **ToLower()** | Returns a copy of this string converted to lowercase. |
| **ToLowerInvariant()** | Returns a copy of this String object converted to lowercase using the casing rules of the invariant culture. |
| **ToString()** | Converts the value of this instance to a String. |
| **ToUpper()** | Returns a copy of this string converted to uppercase. |
| **ToUpperInvariant()** | Returns a copy of this String object converted to uppercase using the casing rules of the invariant culture. |
| **Trim()** | Returns a new string in which all leading and trailing occurrences of a set of specified characters from the current String object are removed. |
| **TrimEnd(Char[])** | Removes all trailing occurrences of a set of characters specified in an array from the current String object. |
| **TrimStart(Char[])** | Removes all leading occurrences of a set of characters specified in an array from the current String object. |

**Operator (Оператори)**

| **Operator** | **Description** |
| --- | --- |
| **Equality(String, String)** | Determines whether two specified strings have the same value. |
| **Inequality(String, String)** | Determines whether two specified strings have different values. |