

System.Boolean Structure

```
[ILASM]
.class public sequential sealed serializable Boolean
extends System.ValueType implements System.IComparable

[C#]
public struct Boolean: IComparable
```

Assembly Info:

- *Name:* mscorlib
- *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00]
- *Version:* 1.0.x.x
- *Attributes:*
 - CLSCompliantAttribute(true)

Implements:

- **System.IComparable**

Summary

Represents a Boolean value.

Inherits From: System.ValueType

Library: BCL

Thread Safety: This type is safe for multithreaded operations.

Description

The **System.Boolean** value type represents the logical values **true** and **false**.

1 Boolean.FalseString Field

```
2 [ILASM]  
3 .field public static initOnly string FalseString  
4  
5 [C#]  
6 public static readonly string FalseString
```

6 Summary

7 Contains a **System.String** representation of the logical value **false**.

8 Description

9 This field is read-only.

10

11 The value of this **System.String** is "False".

12

1 Boolean.TrueString Field

```
2 [ILASM]  
3 .field public static initOnly string TrueString  
4  
5 [C#]  
6 public static readonly string TrueString
```

6 Summary

7 Contains a **System.String** representation of the logical value **true**.

8 Description

9 This field is read-only.

10
11 The value of this **System.String** is "True".

12

Boolean.CompareTo(System.Object) Method

```
[ILASM]  
.method public final hidebysig virtual int32  
CompareTo(object obj)  
  
[C#]  
public int CompareTo(object obj)
```

Summary

Returns the sort order of the current instance compared to the specified **System.Object**.

Parameters

Parameter	Description
<i>obj</i>	A System.Object to compare to the current instance.

Return Value

A **System.Int32** containing a value that reflects the sort order of the current instance as compared to *obj*. The following table defines the conditions under which the returned value is a negative number, zero, or a positive number.

Return Value	Condition
Any negative number	Current instance is false and <i>obj</i> is true .
Zero	Current instance == <i>obj</i> .
Any positive number	Current instance is true and <i>obj</i> is false , or <i>obj</i> is a null reference.

Description

[Note: This method is implemented to support the **System.IComparable** interface.]

Exceptions

1
2
3

Exception	Condition
System.ArgumentException	<i>obj</i> is not a System.Boolean and is not a null reference.

Boolean.Equals(System.Object) Method

```
[ILASM]
.method public hidebysig virtual bool Equals(object obj)

[C#]
public override bool Equals(object obj)
```

Summary

Determines whether the current instance and the specified **System.Object** represent the same type and value.

Parameters

Parameter	Description
<i>obj</i>	The System.Object to compare to the current instance.

Return Value

true if *obj* is a **System.Boolean** with the same value as the current instance. If *obj* is a null reference or is not an instance of **System.Boolean**, returns **false**.

Description

[Note: This method overrides **System.Object.Equals**.]

1 Boolean.GetHashCode() Method

```
2 [ILASM]  
3 .method public hidebysig virtual int32 GetHashCode()  
4  
5 [C#]  
6 public override int GetHashCode()
```

6 Summary

7 Generates a hash code for the current instance.

8 Return Value

9

10 A **System.Int32** value containing a hash code for the current
11 instance.

12 Description

13 The algorithm used to generate the hash code is unspecified.

14

15 [*Note:* This method overrides **System.Object.GetHashCode.**]

16

Boolean.Parse(System.String) Method

```
[ILASM]
.method public hidebysig static bool Parse(string value)

[C#]
public static bool Parse(string value)
```

Summary

Returns the specified **System.String** converted to a **System.Boolean** value.

Parameters

Parameter	Description
<i>value</i>	A System.String containing the value to convert. The string is equivalent to either System.Boolean.TrueString or System.Boolean.FalseString , can contain leading and/or trailing whitespace, and is parsed in a case-insensitive manner.

Return Value

true if *value* is equivalent to **System.Boolean.TrueString**; otherwise, **false**.

Exceptions

Exception	Condition
System.ArgumentNullException	<i>value</i> is a null reference.
System.FormatException	<i>value</i> is not equivalent to either System.Boolean.TrueString or System.Boolean.FalseString .

Example

The following example demonstrates the **System.Boolean.Parse** method.

```
[C#]

using System;
public class BoolParse {
    public static void Main() {
        Boolean b = Boolean.Parse(" true ");
    }
}
```



```
1         Console.WriteLine("\t true \t parses to \"{0}\".",
2         b);
3     }
4 }
5
```

6 The output is

7

8 " true " parses to "True".

9

1 Boolean.ToString(System.IFormatProvide 2 r) Method

```
3 [ILASM]  
4 .method public final hidebysig virtual string  
5 ToString(class System.IFormatProvider provider)  
  
6 [C#]  
7 public string ToString(IFormatProvider provider)
```

8 Summary

9 Converts the value of this instance to its equivalent **String**
10 representation.

11 Parameters

12
13

Parameter	Description
<i>provider</i>	(Reserved) A System.IFormatProvider object.

14

15 Return Value

16

17 **System.Boolean.TrueString** if the value of this instance is **true**, or
18 **System.Boolean.FalseString** if the value of this instance is **false**.

19 Description

20 The *provider* parameter is reserved. It does not participate in the
21 execution of this method.

22

1 Boolean.ToString() Method

```
2 [ILASM]  
3 .method public hidebysig virtual string ToString()  
4  
5 [C#]  
6 public override string ToString()
```

6 Summary

7 Returns a **System.String** representation of the value of the current
8 instance.

9 Return Value

10

11 **System.Boolean.FalseString** if the value of the current instance is
12 **false**; otherwise, **System.Boolean.TrueString**.

13 Description

14 [Note: This method overrides **System.Object.ToString**.]
15