

# System.RankException Class

```
[ILASM]
.class public serializable RankException extends
System.SystemException

[C#]
public class RankException: SystemException
```

## 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)

## Summary

Represents the error that occurs when an array with an incorrect number of dimensions is passed to a method.

## Inherits From: System.SystemException

## Library: BCL

**Thread Safety:** All public static members of this type are safe for multithreaded operations. No instance members are guaranteed to be thread safe.

## Example

The following example demonstrates an error that causes a **System.RankException** exception.

```
[C#]

using System;
public class RankExample {
    public static void Main() {
        int[] oneDAry = new int[5];
        int[,] twoDAry = new int[2,3];
        for (int i = 0; i < 2; i++) {
            oneDAry.SetValue(i, i);
        }
        try {
            Array.Copy(oneDAry, twoDAry, 2);
        }
        catch (RankException e) {
```

```
1         Console.WriteLine("Error caught: {0}", e);
2     }
3 }
4 }
5
```

6 The output is

```
7
8 Error caught: System.RankException: The specified arrays
9 must have the same number of dimensions.
10     at System.Array.Copy(Array sourceArray, Int32
11 sourceIndex, Array destinationArray, Int32
12 destinationIndex, Int32 length)
13     at System.Array.Copy(Array sourceArray, Array
14 destinationArray, Int32 length)
15     at RankExample.Main()
16
17
```

# 1 RankException() Constructor

```
2 [ILASM]  
3 public rtspecialname specialname instance void .ctor()  
  
4 [C#]  
5 public RankException()
```

## 6 Summary

7 Constructs and initializes a new instance of the  
8 **System.RankException** class.

## 9 Description

10 This constructor initializes the **System.RankException.Message**  
11 property of the new instance to a system-supplied message that  
12 describes the error, such as "The two arrays must have the same  
13 number of dimensions." This message takes into account the current  
14 system culture.

15  
16 The **System.RankException.InnerException** property is initialized  
17 to **null**.

18

# RankException(System.String)

## Constructor

```
[ILASM]
public rtspecialname specialname instance void .ctor(string
message)

[C#]
public RankException(string message)
```

### Summary

Constructs and initializes a new instance of the **System.RankException** class.

### Parameters

Parameter	Description
<i>message</i>	A <b>System.String</b> that describes the error. The content of <i>message</i> is intended to be understood by humans. The caller of this constructor is required to ensure that this string has been localized for the current system culture.

### Description

This constructor initializes the **System.RankException.Message** property of the new instance using *message*. If *message* is **null**, the **System.RankException.Message** property is initialized to the system-supplied message provided by the constructor that takes no arguments. The **System.RankException.InnerException** property is initialized to **null**.

# RankException(System.String, System.Exception) Constructor

```
[ILASM]
public rtspecialname specialname instance void .ctor(string
message, class System.Exception innerException)

[C#]
public RankException(string message, Exception
innerException)
```

## Summary

Constructs and initializes a new instance of the **System.RankException** class.

## Parameters

Parameter	Description
<i>message</i>	A <b>System.String</b> that describes the error. The content of <i>message</i> is intended to be understood by humans. The caller of this constructor is required to ensure that this string has been localized for the current system culture.
<i>innerException</i>	An instance of <b>System.Exception</b> that is the cause of the current Exception. If <i>innerException</i> is non-null, then the current Exception was raised in a catch block handling <i>innerException</i> .

## Description

This constructor initializes the **System.RankException.Message** property of the new instance using *message*, and the **System.RankException.InnerException** property using *innerException*. If *message* is **null**, the **System.RankException.Message** property is initialized to the system-supplied message provided by the constructor that takes no arguments.

[Note: For information on inner exceptions, see **System.Exception.InnerException**.]