

# 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 00]
- *Version:* 2.0.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 ) {
            Console.WriteLine( "Error caught: {0}", e );
        }
    }
}
```

```
1
2 The output is
3
4 Error caught: System.RankException: The specified arrays must have the same
5 number of dimensions.
6     at System.Array.Copy(Array sourceArray, Int32 sourceIndex, Array
7 destinationArray, Int32 destinationIndex, Int32 length)
8     at System.Array.Copy(Array sourceArray, Array destinationArray, Int32
9 length)
10     at RankExample.Main()
11
12
```

# RankException() Constructor

```
[ILAsm]  
public rtspecialname specialname instance void .ctor()  
  
[C#]  
public RankException()
```

## Summary

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

## Description

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

The `System.RankException.InnerException` property is initialized to `null`.

# 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 <code>System.String</code> 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 System.String 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 System.Exception 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.]