

1 System.RankException Class

```
2 [ILAsm]  
3 .class public serializable RankException extends System.SystemException  
4 [C#]  
5 public class RankException: SystemException
```

6 Assembly Info:

- 7 • *Name:* mscorlib
- 8 • *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00]
- 9 • *Version:* 2.0.x.x
- 10 • *Attributes:*
 - 11 ○ CLSCompliantAttribute(true)

12 Summary

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

15 Inherits From: System.SystemException

16

17 **Library:** BCL

18

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

21

22 Example

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

25

26 [C#]

```
27 using System;  
28 public class RankExample {  
29     public static void Main() {  
30         int[] oneDary = new int[5];  
31         int[,] twoDary = new int[2,3];  
32         for (int i = 0; i < 2; i++ ) {  
33             oneDary.SetValue( i, i );  
34         }  
35         try {  
36             Array.Copy( oneDary, twoDary, 2);  
37         }  
38         catch ( RankException e ) {  
39             Console.WriteLine( "Error caught: {0}", e );  
40         }  
41     }  
42 }
```

```
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
```

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 `System.RankException` class.

8 Description

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

13 The `System.RankException.InnerException` property is initialized to `null`.
14
15

1 RankException(System.String) Constructor

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

6 Summary

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

8 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.

9

10 Description

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

16

1 RankException(System.String, 2 System.Exception) Constructor

```
3 [ILAsm]  
4 public rtspecialname specialname instance void .ctor(string message, class  
5 System.Exception innerException)  
  
6 [C#]  
7 public RankException(string message, Exception innerException)
```

8 Summary

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

10 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.
<i>innerException</i>	An instance of <code>System.Exception</code> 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> .

11 12 Description

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

18
19 [Note: For information on inner exceptions, see `System.Exception.InnerException`.]
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