

1 System.RankException Class

2
3

```
4 [ILASM]  
5 .class public serializable RankException extends  
6 System.SystemException  
  
7 [C#]  
8 public class RankException: SystemException
```

9 Assembly Info:

- 10 • Name: mscorlib
- 11 • Public Key: [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00]
- 12 • Version: 1.0.x.x
- 13 • Attributes:
 - 14 ○ CLSCompliantAttribute(true)

15 Summary

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

19 Inherits From: System.SystemException

20

21 **Library:** BCL

22

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

25

26 Example

27

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

30
31

```
32 using System;  
33 public class RankExample {  
34     public static void Main() {  
35         int[] oneDAry = new int[5];  
36         int[,] twoDAry = new int[2,3];  
37         for (int i = 0; i < 2; i++) {  
38             oneDAry.SetValue(i, i);  
39         }  
40         try {  
41             Array.Copy(oneDAry, twoDAry, 2);  
42         }  
43         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

1 RankException(System.String)

2 Constructor

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

8 Summary

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

11 Parameters

12
13

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.

14

15 Description

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

22

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

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

9 Summary

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

12 Parameters

13
14

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> .

15

16 Description

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

24

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

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