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 );
```

```
        }
    }
}
```

The output is

```
Error caught: System.RankException: The specified arrays must have the
same number of dimensions.
    at System.Array.Copy(Array sourceArray, Int32 sourceIndex, Array
destinationArray, Int32 destinationIndex, Int32 length)
    at System.Array.Copy(Array sourceArray, Array destinationArray,
Int32 length)
    at RankExample.Main()
```

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
message	A `System.String` that describes the error. The content of *message* 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
message	A `System.String` that describes the error. The content of *message* 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.
innerException	An instance of `System.Exception` that is the cause of the current Exception. If *innerException* is non-null, then the current Exception was raised in a catch block handling *innerException*.

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`.]