

JAVA.LANG.MATH.EXP METHOD

http://www.tutorialspoint.com/java/lang/math_exp.htm

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Description

The **java.lang.Math.exp** method returns Euler's number e raised to the power of a double value. Special cases:

- If the argument is NaN, the result is NaN.
- If the argument is positive infinity, then the result is positive infinity.
- If the argument is negative infinity, then the result is positive zero.

The computed result must be within 1 ulp of the exact result. Results must be semi-monotonic.

Declaration

Following is the declaration for **java.lang.Math.exp** method

```
public static double exp(double a)
```

Parameters

- **a** -- the exponent to raise e to.

Return Value

This method returns the value e^a , where e is the base of the natural logarithms.

Exception

- **NA**

Example

The following example shows the usage of lang.Math.exp method.

```
package com.tutorialspoint;

import java.lang.*;

public class MathDemo {

    public static void main(String[] args) {

        // get two double numbers
        double x = 5;
        double y = 0.5;

        // print e raised at x and y
        System.out.println("Math.exp(" + x + ")=" + Math.exp(x));
        System.out.println("Math.exp(" + y + ")=" + Math.exp(y));
    }
}
```

Let us compile and run the above program, this will produce the following result:

```
Math.exp(5)=148.4131591025766
Math.exp(0.5)=1.6487212707001282
```

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