

JAVA.LANG.MATH.IEEEremainder METHOD

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

Copyright © tutorialspoint.com

Description

The **java.lang.Math.IEEEremainder***doublef1, doublef2* returns Computes the remainder operation on two arguments as prescribed by the IEEE 754 standard. The remainder value is mathematically equal to $f1 - f2 \times n$, where n is the mathematical integer closest to the exact mathematical value of the quotient $f1/f2$, and if two mathematical integers are equally close to $f1/f2$, then n is the integer that is even. If the remainder is zero, its sign is the same as the sign of the first argument. Special cases:

- If either argument is NaN, or the first argument is infinite, or the second argument is positive zero or negative zero, then the result is NaN.
- If the first argument is finite and the second argument is infinite, then the result is the same as the first argument.

Declaration

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

```
public static double IEEEremainder(double f1, double f2)
```

Parameters

- **f1** -- the dividend.
- **f2** -- the divisor.

Return Value

This method returns the remainder when $f1$ is divided by $f2$.

Exception

- NA

Example

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

```
package com.tutorialspoint;

import java.lang.*;

public class MathDemo {

    public static void main(String[] args) {

        // get two double numbers
        double x = 60984.1;
        double y = -497.99;

        // get the remainder when x/y
        System.out.println("Math.IEEEremainder(" + x + "," + y + ")="
            + Math.IEEEremainder(x, y));

        // get the remainder when y/x
        System.out.println("Math.IEEEremainder(" + y + "," + x + ")="
            + Math.IEEEremainder(y, x));
    }
}
```

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

```
Math.IEEEremainder(60984.1, -497.99)=229.31999999999744  
Math.IEEEremainder(-497.99, 60984.1)=-497.99
```

Loading [Mathjax]/jax/output/HTML-CSS/jax.js