

JAVA.LANG.STRICTMATH.SCALB METHOD

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

Copyright © tutorialspoint.com

Description

The **java.lang.StrictMath.scalb(float f, int scaleFactor)** method returns $d \times 2^{\text{scaleFactor}}$ rounded as if performed by a single correctly rounded floating-point multiply to a member of the float value set. It includes these cases:

- If the first argument is NaN, NaN is returned.
- If the first argument is infinite, then an infinity of the same sign is returned.
- If the first argument is zero, then a zero of the same sign is returned.

Declaration

Following is the declaration for **java.lang.StrictMath.scalb** method

```
public static float scalb(float f, int scaleFactor)
```

Parameters

- **f** -- This is the number to be scaled by a power of two.
- **scaleFactor** -- This is the power of 2 used to scale f.

Return Value

This method returns $d \times 2^{\text{scaleFactor}}$

Exception

- NA

Example

The following example shows the usage of java.lang.StrictMath.scalb method.

```
package com.tutorialspoint;

import java.lang.*;

public class StrictMathDemo {

    public static void main(String[] args) {

        float f1 = 5.0f , f2 = 9.56f, f3 = 0.0f;
        int power = 2;

        // returns (First argument*(pow(second argument,2) i.e d × 2scaleFactor)

        float scalbValue = StrictMath.scalb(f1 , power);
        System.out.println("value = " + scalbValue1);

        scalbValue = StrictMath.scalb(f2 , power);
        System.out.println("value = " + scalbValue1);

        scalbValue = StrictMath.scalb(f3 , power);
        System.out.println("value = " + scalbValue1);
    }
}
```

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

```
value = 20.0  
value = 38.24  
value = 0.0
```

Loading [MathJax]/jax/output/HTML-CSS/fonts/TeX/fontdata.js