

JAVA.LANG.FLOAT.INTBITSTOFloat METHOD

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

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Description

The **java.lang.Float.intBitsToFloat** method returns the float value corresponding to a given bit representation. The argument is considered to be a representation of a floating-point value according to the IEEE 754 floating-point "single format" bit layout. It includes the following important points:

- If the argument is 0x7f800000, the result is positive infinity.
- If the argument is 0xff800000, the result is negative infinity.
- If the argument is any value in the range 0x7f800001 through 0x7fffffff or in the range 0xff800001 through 0xffffffff, the result is a NaN.

Declaration

Following is the declaration for **java.lang.Float.intBitsToFloat** method

```
public static float intBitsToFloat(int bits)
```

Parameters

- **bits** -- This is an integer.

Return Value

This method returns the floating-point value with the same bit pattern.

Exception

- **NA**

Example

The following example shows the usage of java.lang.Float.intBitsToFloat method.

```
package com.tutorialspoint;

import java.lang.*;

public class FloatDemo {

    public static void main(String[] args) {

        Float f = new Float("2.50f");

        /* returns the floating-point value with the same bit pattern */
        System.out.println(f.intBitsToFloat(123));
        System.out.println(f.intBitsToFloat(0x7f800000));
        System.out.println(f.intBitsToFloat(0xff800000));
    }
}
```

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

```
1.72E-43
Infinity
-Infinity
```

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