

JAVA.LANG.STRICTMATH.ATAN METHOD

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

Copyright © tutorialspoint.com

Description

The **java.lang.StrictMath.atan** method returns the arc tangent of a value. The returned angle is in the range **-pi/2 through pi/2**. It includes these cases:

- If the argument is NaN, then the result is NaN.
- If the argument is zero, then the result is a zero with the same sign as the argument.

Declaration

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

```
public static double atan(double a)
```

Parameters

- **a** -- This is the value whose arc tangent is to be returned.

Return Value

This method returns the arc tangent of the argument.

Exception

- **NA**

Example

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

```
package com.tutorialspoint;

import java.lang.*;

public class StrictMathDemo {

    public static void main(String[] args) {

        double d1 = 0.20 , d2 = 60.00, d3 = 0;

        /* returns the arc tangent of a value, returned angle range is
        -pi/2 to pi/2 */

        double dAbsValue = StrictMath.atan(d1);
        System.out.println("arc tangent of " + d1 + " = " + dAbsValue);

        dAbsValue = StrictMath.atan(d2);
        System.out.println("arc tangent of " + d2 + " = " + dAbsValue);

        dAbsValue = StrictMath.atan(d3);
        System.out.println("arc tangent of " + d3 + " = " + dAbsValue);
    }
}
```

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

```
arc tangent of 0.2 = 0.19739555984988078
arc tangent of 60.0 = 1.554131203080956
arc tangent of 0.0 = 0.0
```

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