JAVA.LANG.MATH.ATAN METHOD

Description

The **java.lang.Math.atan*doublea*** returns the arc tangent of an angle, in the range of -pi/2 through pi/2. Special 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.

A result must be within 1 ulp of the correctly rounded result. Results must be semi-monotonic.

Declaration

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

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

Parameters

- **a** -- 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 lang.Math.atan method.

```
package com.tutorialspoint;

import java.lang.*;

public class MathDemo {

   public static void main(String[] args) {

   // get a variable x which is equal to PI/2
   double x = Math.PI / 2;

   // convert x to radians
   x = Math.toRadians(x);

   // get the arc tangent of x
   System.out.println("Math.atan(" + x + ")" + Math.atan(x));
   }
}
```

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

```
Math.atan(0.027415567780803774)0.0274087022410345
```