

JAVA.LANG.STRICTMATH.HYPOT METHOD

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

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Description

The **java.lang.StrictMath.hypot** method returns $\sqrt{x^2 + y^2}$ without intermediate overflow or underflow. It includes some cases:

- If either argument is infinite, then the result is positive infinity.
- If either argument is NaN and neither argument is infinite, then the result is NaN.

Declaration

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

```
public static double hypot(double x, double y)
```

Parameters

- **x** -- This is the value to be used.
- **y** -- This is the value to be used.

Return Value

This method returns $\sqrt{x^2 + y^2}$ without intermediate overflow or underflow.

Exception

- **NA**

Example

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

```
package com.tutorialspoint;

import java.lang.*;

public class StrictMathDemo {

    public static void main(String[] args) {

        double d1 = 3, d2 = 4, d3 = 6;

        // returns sqrt(x^2 + y^2)
        double hypotValue = StrictMath.hypot(d1, d2);
        System.out.println("hypotenuse value of d1 and d2 = " + hypotValue);

        hypotValue = StrictMath.hypot(d2, d3);
        System.out.println("hypotenuse value of d2 and d3 = " + hypotValue);
    }
}
```

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

```
hypotenuse value of d1 and d2 = 5.0
hypotenuse value of d2 and d3 = 7.211102550927978
Loading [MathJax]/jax/output/HTML-CSS/fonts/TeX/fontdata.js
```