

JAVA.MATH.BIGDECIMAL.DIVIDE METHOD

http://www.tutorialspoint.com/java/math/bigdecimal_divide_introundingmode_scale.htm

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Description

The **java.math.BigDecimal.divide***BigDecimal divisor, int scale, int roundingMode* returns a BigDecimal whose value is *this/divisor*, and whose scale is as specified. If rounding must be performed to generate a result with the specified scale, the specified rounding mode is applied.

Declaration

Following is the declaration for **java.math.BigDecimal.divide** method

```
public BigDecimal divide(BigDecimal divisor, int scale, int roundingMode)
```

Parameters

- **divisor** - value by which this BigDecimal is to be divided
- **scale** - scale of the BigDecimal quotient to be returned
- **roundingMode** - rounding mode to apply

Return Value

This method returns a BigDecimal object whose value is this / divisor rounded as specified to given scale

Exception

- **ArithmeticException** - if divisor == 0, or roundingMode == ROUND_UNNECESSARY and this.scale is insufficient to represent the result of the division exactly
- **IllegalArgumentException** - if roundingMode does not represent a valid rounding mode

Example

The following example shows the usage of math.BigDecimal.divide method.

```
package com.tutorialspoint;

import java.math.*;

public class BigDecimalDemo {

    public static void main(String[] args) {

        // create 3 BigDecimal objects
        BigDecimal bg1, bg2, bg3;

        bg1 = new BigDecimal("16");
        bg2 = new BigDecimal("3");

        // divide bg1 with bg2 with 4 scale
        // 1 specifies BigDecimal.ROUND_DOWN
        bg3 = bg1.divide(bg2, 4, 1);

        String str = "Division result is " +bg3;

        // print bg3 value
        System.out.println( str );
    }
}
```

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

Division result is 5.3333

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