JAVA.MATH.BIGDECIMAL.DIVIDEANDREMAINDER METHOD

Description

The **java.math.BigDecimal.divideAndRemainder***BigDecimaldivisor, MathContextmc* returns a two-element BigDecimal array containing the result of divideToIntegralValue followed by the result of remainder on the two operands.

If both the integer quotient and remainder are needed, this method is faster than using the divideToIntegralValue and remainder methods separately because the division need only be carried out once.

Declaration

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

```
public BigDecimal[] divideAndRemainder(BigDecimal divisor, MathContext mc)
```

Parameters

- **divisor** - value by which this BigDecimal is to be divided, and the remainder computed
- **mc** - the context to use

Return Value

This method returns a two element BigDecimal array: the quotient *theresultofdivideToIntegralValue* is the initial element and the remainder is the final element.

Exception

- **ArithmeticException** - if divisor == 0
- **ArithmeticException** - if the result is inexact but the rounding mode is UNNECESSARY, or mc.precision > 0 and the result of this.divideToIntgralValue*divisor* would require a precision of more than mc.precision digits.

Example

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

```
package com.tutorialspoint;

import java.math.*;

public class BigDecimalDemo {

public static void main(String[] args) {

        // create 2 BigDecimal objects
        BigDecimal bg1, bg2;

        bg1 = new BigDecimal("143.145");
        bg2 = new BigDecimal("10.01");

 MathContext mc = new MathContext(2);

 // BigDecimal array bg stores result of bg1/bg2,
        // using mc
 BigDecimal bg[] = bg1.divideAndRemainder(bg2, mc);

        // print quotient and remainder
 System.out.println("Division result");
```

```
 System.out.println("Quotient is " + bg[0] );
 System.out.println("Remainder is " + bg[1] );
    }
}
```

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

```
Division result
Quotient is 14
Remainder is 3.005
```