JAVA.MATH.BIGDECIMAL.ROUND METHOD

Description

The **java.math.BigDecimal.round***MathContextmc* returns a BigDecimal rounded according to the MathContext settings. If the precision setting is 0 then no rounding takes place.The effect of this method is identical to that of the plus*MathContext* method.

Declaration

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

```
public BigDecimal round(MathContext mc)
```

Parameters

- **mc** - the context to use

Return Value

This method returns a BigDecimal rounded according to the MathContext settings.

Exception

- **ArithmeticException** - if the rounding mode is UNNECESSARY and the BigDecimal operation would require rounding

Example

The following example shows the usage of math.BigDecimal.round 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("5.46497");

        MathContext mc = new MathContext(3); // 3 precision

        // bg1 is rounded using mc
        bg2 = bg1.round(mc);

 String str = "The value " + bg1 + " after rounding is " + bg2;

        // print bg2 value
        System.out.println( str );
    }
}
```

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

```
The value 5.46497 after rounding is 5.46
```