JAVA.MATH.BIGINTEGER.GCD METHOD

Description

The **java.math.BigInteger.gcd***BigIntegerval* returns a BigInteger whose value is the greatest common divisor of abs*this* and abs*val*. It returns 0 if this==0 && val==0.

Declaration

Following is the declaration for **java.math.BigInteger.gcd** method

```
public BigInteger gcd(BigInteger val)
```

Parameters

- **val** - value with which the GCD is to be computed

Return Value

This method returns a BigInteger whose value is GCD*abs*(*this*, abs*val*)

Exception

- **NA**

Example

The following example shows the usage of math.BigInteger.gcd method

```
package com.tutorialspoint;

import java.math.*;

public class BigIntegerDemo {

public static void main(String[] args) {

        // create 3 BigInteger objects
 BigInteger bi1, bi2, bi3;

 // assign values to bi1, bi2
 bi1 = new BigInteger("18");
 bi2 = new BigInteger("24");

 // assign gcd of bi1, bi2 to bi3
 bi3 = bi1.gcd(bi2);

 String str = "GCD of " + bi1 + " and " + bi2 + " is " +bi3;

 // print bi3 value
 System.out.println( str );
    }
}
```

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

```
GCD of 18 and 24 is 6
```