

```
public static int greatestCommonDivisor(int number1, int number2) {  
    int temp = number1;  
  
    while (temp != 0) {  
        if (number1 < number2) {  
            temp = number1;  
            number1 = number2;  
            number2 = temp;  
        }  
        temp = number1 % number2;  
        if (temp != 0) {  
            number1 = number2;  
            number2 = temp;  
        }  
    }  
  
    return number2;  
}
```