```
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;
```