ErrorLog: PrimeNumber

Youdis

```
1  package Mastery;
2
3  import java.util.Scanner;
4
5  public class PrimeNumber {
6
7      public static void main(String[] args) {
8          // TODO Auto-generated method stub
9          //creating new scanner to record user input
10         Scanner Input = new Scanner(System.in);
11         //prompt user to enter a number
12         System.out.print("Please enter a number: ");
13         //record number entered
14         int userNum = Input.nextInt();
15         boolean prime = false;
16         if (userNum == 0 || userNum == 1) {
17             System.out.print(userNum + " is not a prime number");}
18         for (int i = 2; i <= (userNum/2); i++) {
19             if (userNum % i != 0) {
20                 prime = true;}
21              else {
22                 prime = false;}
23             }
24 System.out.print(prime);
25 }
26 }
27
```

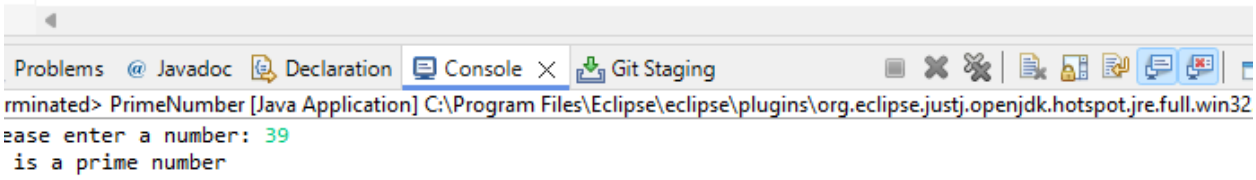
Problems @ Javadoc Declaration Console Git Staging

<terminated> PrimeNumber [Java Application] C:\Program Files\Eclipse\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_2

```
Please enter a number: 39
true
```

It’s telling me 39 is prime number even though it isn’t

```java
package Mastery;

import java.util.Scanner;

public class PrimeNumber {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        //creating new scanner to record user input
        Scanner Input = new Scanner(System.in);
        //prompt user to enter a number
        System.out.print("Please enter a number: ");
        //record number entered
        int userNum = Input.nextInt();
        // initializing variable that will record whether number entered is prime or not
        boolean prime = true;
        //checking if number is 1 or 0 as these won't work in for loop as they are lower than 2
        if (userNum == 0 || userNum == 1) {
        //if 1 or 0 then set prime as false
            prime = false;}

        // for loop to divide number entered by every number from 2 to half of the number
        for (int i = 2; i <= (userNum/2); i++) {
            // checking if number is fully divisible
            if (userNum % i == 0) {
            // if it is fully divisible by a number then set prime to false
                prime = false;}
            }
        // checking if prime is true or not
        if (prime) {
        // if prime is true then number was a prime number and will output that to user
        System.out.print(userNum + " is a prime number");}
        // if prime is false then number was not a prime number and will output that to user
        else {System.out.print(userNum + " is a prime number");}

}
}
```



The if statement in the for loop made it so that if a bigger number like 39 would be divided by 13 which it is divisible making prime false but then after that would be divided by 14 which isn't divisible turning prime value to true. Fixed this by initializing prime value as true and