ReflectionLogs - PrimeNumbers[Mastery]

```java
package Mastery;

import java.util.Scanner;

public class PrimeNumbers {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        //Preparing for user input
        Scanner input = new Scanner(System.in);

        //Declaration
        int user_num; //user input
        int i; //for loop var
        boolean prime = false; //to check if prime or not

        System.out.println("Enter a number. This program will tell you if it is prime or not: "); //prompt user to enter number
        user_num = input.nextInt(); //store number in variable



        if (user_num == 1 || user_num == 0) //If the users inputed number is 1, 0 , or a negative number
        {
            prime = true;

        }


        for (i = 2; i <= user_num / 2; ++i) //Take the numbers between 2 and usernum
        {
            if (user_num % i == 0) //if the remainder is 0, than that means the number is not a prime

            {
                prime = true;

            }
        }

        if (!prime) //if prime is not true
        {
            System.out.print("Your number is prime.");
        }
        else //if prime is true
        {
            System.out.print("Your number isn't prime.");
        }
```

So far I have just copy pasted my code from the chapter 5 code, so I can begin adding on to it.

```java
public static void main(String[] args) {
    // TODO Auto-generated method stub

    //Preparing for user input
    Scanner input = new Scanner(System.in);

    //Declaration
    int user_num; //user input

    System.out.println("Enter a number. This program will tell you if it is prime or not: "); //prompt user to enter number
    user_num = input.nextInt(); //store number in variable
    isPrime(user_num);
```

I removed the boolean prime variable and am going to add it to the new method I created, and I will also in that method use the parameter of user_num.

```java
public static void isPrime(int user_num) {
    boolean prime = false;
```

I created a new method, and removed the var boolean prime from the main method, and have put it in the isPrime method with the parameter user_num.

```java
public class PrimeNumbers {

   public static void isPrime(int user_num) {
       boolean prime = false;

       if (user_num == 1 || user_num == 0) //If the users inputed number is 1, 0 , or a negative number
       {
            prime = true;

       }


       for (int i = 2; i <= user_num / 2; ++i) //Take the numbers between 2 and user number
       {
           if (user_num % i == 0) //if the remainder is 0, than that means the number is not a prime

           {
               prime = true;

           }
       }


       if (!prime) //if prime is not true
           {
               System.out.print("Your number is prime.");
           }
           else //if prime is true
           {
               System.out.print("Your number isn't prime.");
           }
```

To complete the code, I copy pasted the if, for and if statements from my chapter 5

code, and the code works. I modified the for loop by creating i of type int in the for loop, which I originally had defined outside of the for loop. Now the code will run and work properly.