Reflection Log

```
package mastery;

import java.util.Scanner;

public class Primenumber {
    public static void main(String[] args)
    {
          Scanner in = new Scanner(System.in);
```

Imports scanner in so that the user can be able to input stuff
Also has public static void as the main code

```
System.out.print("Enter a number: ");
int num = in.nextInt();
```

Prompts user to input number and stores the number in an int variable

```
public static boolean isPrime(int num) {
```

Start of the method which has boolean instead of void so that it returns a boolean and initializes variable int num inside the brackets

```
if (num == 1 | num == 0) {

    return false;
}
```

Returns false if the number is 1 or 0 since they aren't prime numbers and can't be applied to the equation used to check if the numbers are prime or not

```
for (int i = 2; i <= num / 2; i++) {
  if (num % i == 0) {

      return false;
    }
}
```

For loop that gives a divider number that starts at 2 and if the number the user inputted divided by 2 is higher than the divider number it will add to the divider number.
Then divides the number the user input by the divider number and takes the remainder and if it equals 0 it returns false

```
        return true;
    }
```

Returns true if the input passes all the prime number checks and doesn't trigger return false

```
        if (isPrime(num)) {
            System.out.println(num + " is a prime number.");}
        else {
            System.out.println(num + " is not a prime number.");}
    }
```

Applies the isPrime method to the user input and runs it through the isPrime method
Outputs (num + " is a prime number.") if it returns true

Outputs (num + " is not a prime number.") if it returns false