

# Reflection Log

```
3 import java.util.Scanner;
4
5 public class Primenumber {
6
7     public static void main(String[] args) {
8
9         Scanner scanner = new Scanner(System.in);
10    }
```

I imported the scanner for the code.

```
// Prompt the user for two numbers
System.out.print("Enter the first number: ");
int start = scanner.nextInt();
```

The program prompts the user to input two numbers, the first a starting number.

```
System.out.print("Enter the second number: ");
int end = scanner.nextInt();
```

The user is prompted to enter the ending number.

```
// Display prime numbers between the two numbers
System.out.println("Prime numbers between " + start + " and " + end + ":");
for (int i = start; i <= end; i++) {
    if (isPrime(i)) {
        System.out.println(i);
    }
}

scanner.close();
```

The program displays the prime numbers between the starting and end numbers.

```
// Method to check if a number is prime
public static boolean isPrime(int num) {
    if (num <= 1) {
        return false; // Numbers less than or equal to 1 are not prime
    }
    for (int i = 2; i <= Math.sqrt(num); i++) { // Check up to the square root of num
        if (num % i == 0) {
            return false; // If divisible by any number other than 1 and itself, it's not prime
        }
    }
    return true; // If no divisors found, it's prime
}
```

Now this is the method to check if the number is a prime number or not, first it checks if the number is less than or equal to 1 which makes it not a prime number. Then it checks if the number if it can be divided by more than just 1 and itself, if so it's not a prime number. If no divisors and everything else is true its a prime number.