

Credit Name: CSE 2110 Procedural Programming 1

Assignment Name: PrimeNumber Part A

Describe the errors you've encountered while working on this assignment. What caused the error and how do you overcome the error?

```
Scanner input = new Scanner(System.in);

System.out.println("Please enter any whole number: ");
int num = input.nextInt();

for (int i = 2; i<num; i++) {
    if (num % i == 0) {
        System.out.print("Your number is NOT a prime number.");
        break;
    }
}

System.out.print("Your number IS a prime number!");
```

```
Welcome to the Prime Number application.

Please enter any whole number:
6
Your number is NOT a prime number.Your number IS a prime number!
```

Although the first part of the output is correct (Stating that it is not a prime number), it continues on to print that it is a prime number afterwards.

```
int prime = 0;

for (int i = 2; i<num; i++) {
    if (num % i == 0) {
        prime = 1;
        break;
    }
}

if (prime == 1) {
    System.out.print("Your number is NOT a prime number.");
}
else {
    System.out.print("Your number IS a prime number!");
}
```

```
Welcome to the Prime Number application.

Please enter any whole number:
6
Your number is NOT a prime number.
```

To fix this, instead of making it print the statement directly in the first if statement, I created a variable that would change depending on the outcome, and created a if-else statement afterwards to print the correct responding message.