**Part 4: Logic Check**

1. The return types of the sumAll methods are long and int
2. The relation that must be true between the lengths of arr and max for the second version of sumAll to work is that they should have the same length.
3. The return types of the squareSum methods are long and int
4. The use of init(arr) call before calling squareSum(arr, 5) is initialize the array inside the method
5. The return types of the fib methods are long and int
6. The Fibonacci output starts at 2 since the array stores the data starting from arr[0] and if we were to start at i = 0, the array wouldn’t work since it doesn’t store anything before 0.
7. The return types of the factorial methods are long and int
8. The Factorial output starts at 2 2 since the array stores the data starting from arr[0] and if we were to start at i = 0, the array wouldn’t work since it doesn’t store anything before 0.
9. It is declared as an array of long since long is able to hold large whole numbers
10. When changing MAXSIZE to 10, the whole program does not continue to work. Since it doesn’t work, we would have to fix the boundaries of the arrays.