

1 Why did Fibonacci fail the testThrowsIllegalArgumentException test? What did you have to do to fix it?

The testThrowsIllegalArgumentException test is called when in this case n goes below 0, since 0 is the stopping point for this recursive function. In the code, the if statement that was to check if n went below 0 was written with the wrong inequality. Originally the code had $(n \leq 0)$ which includes 0. Instead I changed the inequality to $(n < 0)$ and this fixed the error.

2 Why did Fibonacci fail the testBaseCase test? What (if anything) did you have to do to fix it?

The testBaseCase test was success full after making the changes to the if statement that checked whether n was below 0. Therefore no new changes were made besides the change for number 1.

3 Why did Fibonacci fail the testInductiveCase test? What (if anything) did you have to do to fix it?

There were three changes that had to be made before the testInductiveCase test was not a failure. The first problem was that the if statement that was used to detect the end of the recursion was incorrect. Originally, the if statement had $(n \leq 2)$ but again the cut off for this recursion function was when $n = 0$ or 1 and the equal sign included 2 as well. Instead, I changed it to $(n < 2)$. Next the return statement that called the function again was incorrect. It had that "getFibTerm($n + 1$) - getFibTerm($n - 2$);" when in reality it should have been "getFibTerm($n - 1$) + getFibTerm($n - 2$);" since it should return the sum not the difference. As well, both terms within the function should be decreasing so that the base cases can be met. With those changes everything was correct.