CS 46B Lab Report

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I was the scribe, Sidharth Khanna was the driver.

Part 1:

We should use the method listfiles();

We try 1 and 2 spaces and we chose 2 because it was neat.

I can’t think of a way to do it without recursion because of the multiple directories inside a folder.

Part 2:

2A: For x= 1 to x=20 and the values of x=23, x=25 and x=31 are positive and seem to be correct while all other values are negative and seem wrong.

2B: The Long.MAX\_VALUE gives the maximum value of long data type which is 9223372036854775807.

2D: The first value is 6402373705728000, and the second is 6.4023735E15.

The second one is easier to read as it is represented in exponential notation while the first one is just a long number.

2F: Got a StackOverflow Error.

2h: We see an Assertion Error.

2i: We can do compute factorials by just using for/while loops. This way would be simple too.

Part 3:

The app slows down noticeably after 43.

It’s the reverse order of the Fibonacci sequence in the number of calls.

Part 4:

Yes, we agree that sometimes recursion is not required while sometimes it is necessary.

It can sometimes make the code longer and sometimes make it very short.