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December 1, 2016

Final Assignment

Pseudocode

* Declare a LoopFib class for loop fib algorithm
* Obtain getLoopFib method from Big Java text book and cite the book
* Declare a RecursiveFib class for recursive fib algorithm
* Obtain getRecursiveFib method from Big Java text book and cite the book
* Declare a FastRecursiveFib class for the fast recursive fib algorithm
* Obtain the getFastRecursiveFib method from the youtube video on dynamic programming and cite this source
* Declare a StopWatch class for the timer used
* Obtain the StopWatch class from Big Java test book and cite the book
* Declare a FibTester class\
* Import File, FileNotFoundException, PrintWriter, Scanner, and Math libraries
* Declare instance variables for upper limit (49) and lower limit (1) and for a PrintWriter object
* Declare main method
* In main method create a variable numberOfFibs that will be scanned from input file
* Create a File object for input file
* Create a Scanner object to scan input file
* Scan the input file and include exceptions
* For exceptions: only an integer from 1-49 should be accepted and an empty file should also throw an exception
* Call the method for running test
* Close main method
* Create a method for writing onto the output file with PrintWriter
* Create objects for LoopFib, RecursiveFib, FastRecursiveFib, and StopWatch needed
* Call the methods that will print all 3 different tables
* Close the ouput.txt file
* Close runTest method
* Create 3 more methods that will each do the following

1. Take in parameters for respective Fibonacci sequence method, number of fibs desired, and respective stop watch
2. Contain a for loop that will use the respective Fibonacci sequence methods for said number of desired fibs
3. Create a roughly square table using a rounding of the square root of said number of desired fibs
4. Writes the table onto the output file using PrintWriter