Data Structures

Lab 5 Assignment (Recursion)

Due Date: 15/7

1. What is the call stack?

2. visualize the call stack of the recursive function fibonacci(n) with n = 5
   a. start from the first call from main (fibonacci(5)), until it reaches the base cases (fibonacci(1) and fibonacci (0)).
   b. show the return values of each call as they go back down the call stack.

NOTE: feel free to do the assignment using any drawing, or visualizing tool you prefer, even if you want to use pen and paper, but the final submission should be in PDF format containing the answer of the first question and a picture for the second question. Discussions with your colleagues are encouraged in this assignment.