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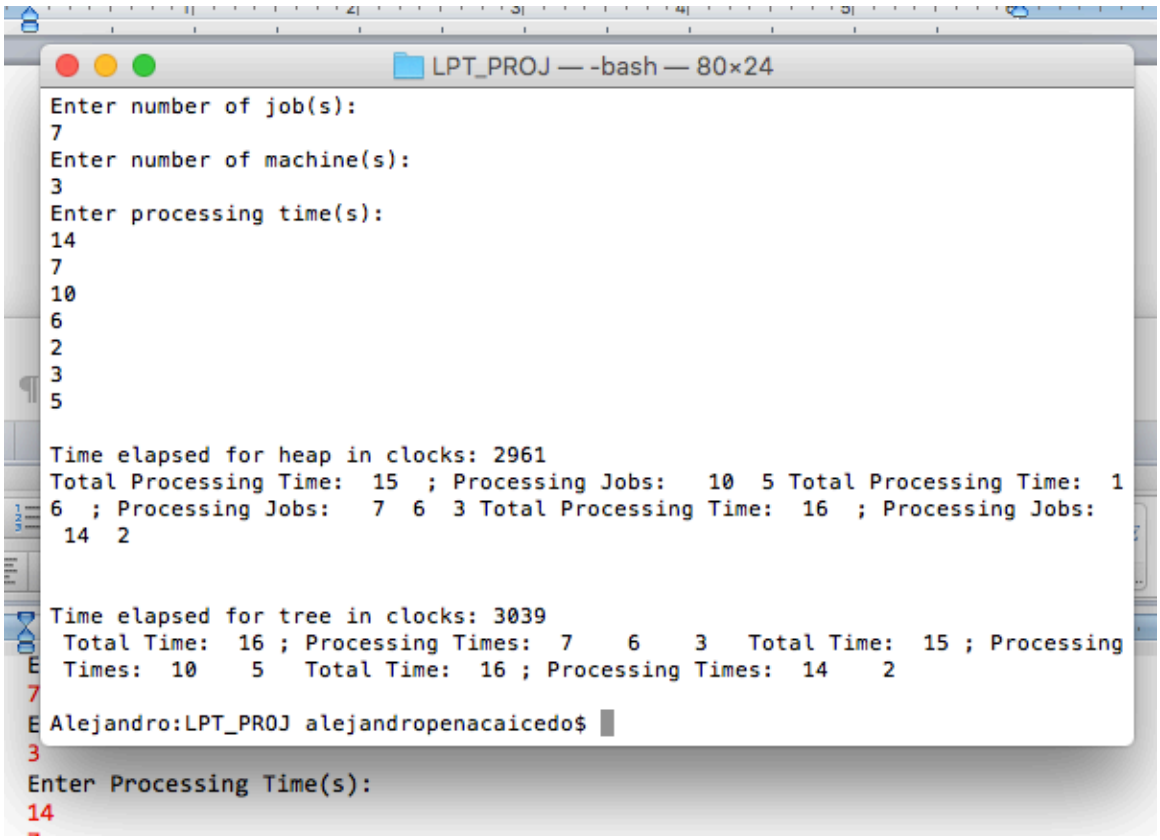
Assignment 3

Explanation

I created two classes each representing a minimum priority queue, the first implementation used an array-based min-heap. The second implementation used a pointer-based min height-biased leftist tree. The LPT part of this assignment was implemented in each class using a struct that represented the machines. The most important parts of the structs were the dynamic array used to hold the processing times and a variable that held the total time for each machine. For both the heap and the tree, the machine struct with the smallest total time variable would rise to either the first element of the array or the first node of the tree. In general, the heap performed at a faster time than the tree.

Testing

Test 1:



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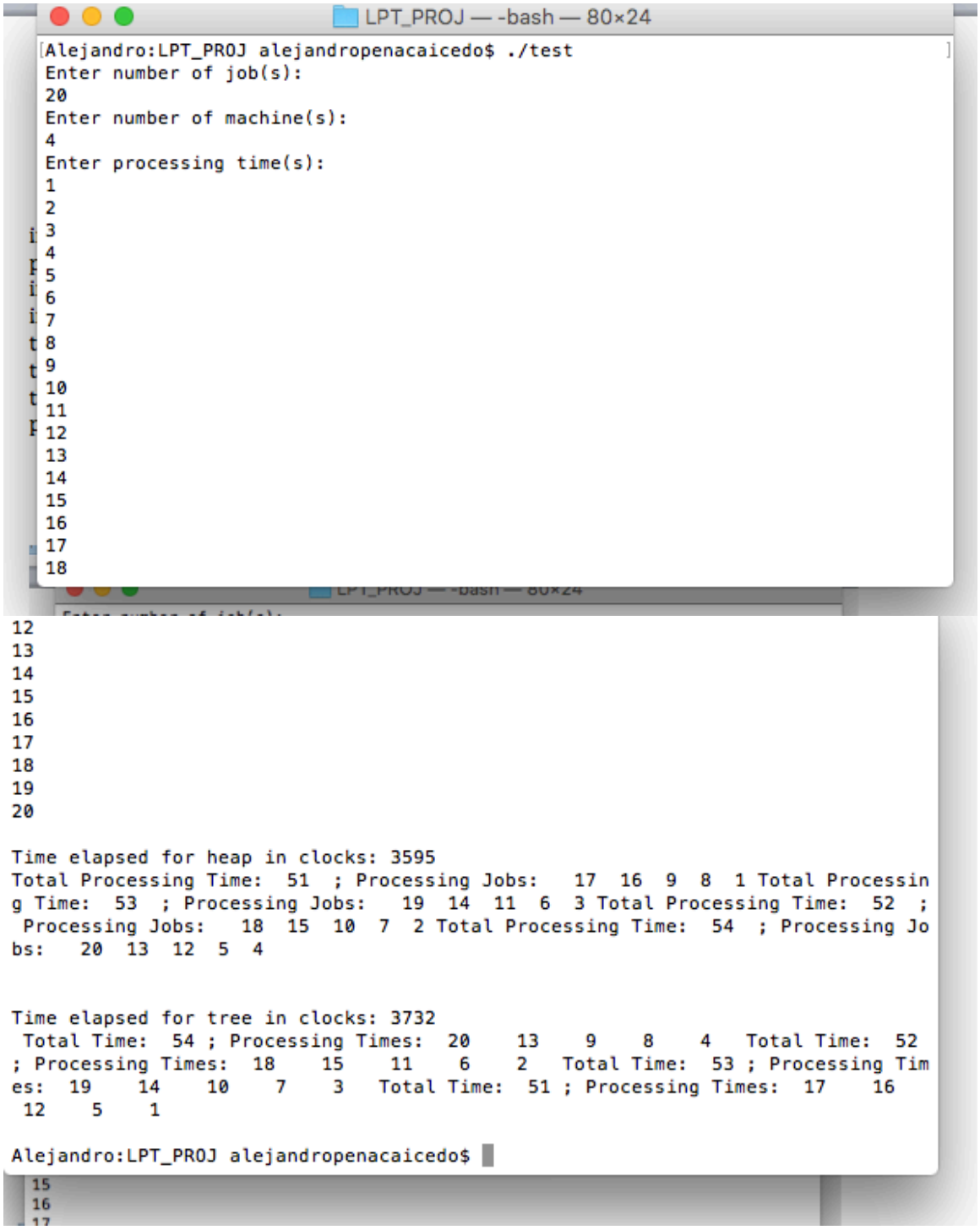
Test 2:



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Test 3: