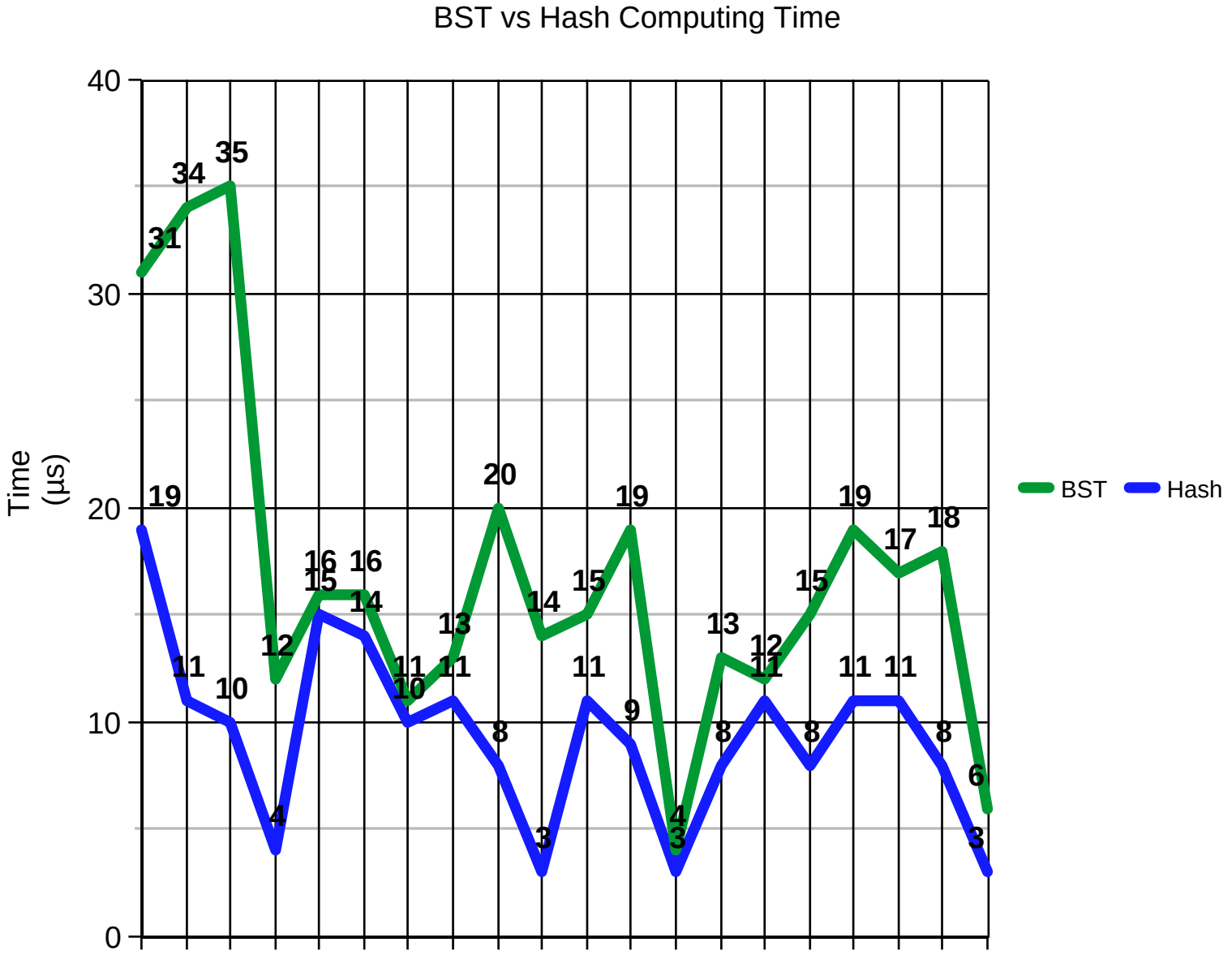
BST vs Hash Computing Time
Time (µs)
40
30
20
10
0
BST
Hash
19 34 35 12 16 16 11 13 20 14 15 19 4 13 12 15 19 17 18 6
19 11 10 4 15 14 10 11 8 3 11 9 3 8 11 8 11 11 8 3

For this test, I compared BST vs Hash time to compute. From assignment 4, we saw that the unsorted array's time was wildly variant, and only a better option when the data set was very small.

To initialize, the hash function took a length of time in between the array and BST.
BST time: ~5.34s
Array time: ~2.31s
Hash time: ~3.83s

The BST had search times between 4-35µs, and the hash function had search times between 3-19µs. In fact, the hash function outperformed the BST in every single test, both using a large data set and a small one. From this, we can conclude that this hash function is a better option in most cases. The only downside with the hash function that I can see is that it uses more memory, so if memory is limited perhaps a standard BST is a better option.