

CS Assessment

Part 1

Array	doublerAppend	doublerInsert
extraLargeArray	4.42526 ms	930.741649 ms
largeArray	747.833 μ s	7.924516 ms
mediumArray	181.202 μ s	201.395 μ s
smallArray	125.01 μ s	67.934 μ s
tinyArray	123.859 μ s	51.976 μ s

With small arrays, even up to length of 1000, the 'unshift' method works up to twice as fast as the 'push' method. However, 'unshift' doesn't scale well! As the arrays get larger, the function's runtime increases at a dramatic rate, especially when compared to the 'push' method. By the time the extraLargeArray is run, the 'unshift' method takes over 200 times as long to return. By reading the table above, one can only assume that the 'unshift' method would continue to take longer and longer the larger the array gets.