Assessment Notes

1. Runtime Analysis

Results		
Array Size	insert	append
extraLargeArray	850.4775 ms	3.558 ms
largeArray	8.8759 ms	725.2 µs
mediumArray	191.4 µs	137.7 µs
smallArray	52 µs	82.8 µs
tinyArray	35.4 µs	75.9 µs

The pattern shown is that there is a direct proportion between the size of the array and the run time of the function. This will increase or decrease as the array is larger or smaller.
The type of function will also affect the running time. The doublerInsert function runs in less time on small and tiny arrays than the doublerAppend, however it is the opposite on medium, large and extraLarge arrays. It starts increasing exponentially as the array gets larger.
The append function scales better, shows a more of a linear growing time as the array size increase.

Extra credit:

The difference between the functions is that .push will add new elements at the end of the array without affecting the index of the prior elements in the array. On the other hand .unshift, adds the new elements at the beginning of the array, changing the index of all prior elements, so as a result, it takes more time to run as the array increases.