

Array Size	Double Append Time	Double Insert Time
tinyArray	79.125 nanoseconds	23.5 nanoseconds
smallArray	33.917 nanoseconds	178.834 nanoseconds
mediumArray	146.084 nanoseconds	180.916 nanoseconds
largeArray	660.958 nanoseconds	9.659916 milliseconds
extraLargeArray	2.130709 milliseconds	Insert: 695.943459 milliseconds

Only time insert on tinyArray is the fastest time at 23.5 with the size of the array at 10 and it shows in the table it can only handle low amounts of data.

Append time is slower on the tinyArray, but once we got into the higher array elements it was faster than the insert time with the .unshift() method.

In general the trend shows to use .push() for high elements to make the run time faster and efficient.

Unshift() runs as another for loop and makes the code $O(n^2)$ or quadratic time complexity because it checks the array first and then it shifts the array over how many times are implemented to add to the beginning.second