Big O

Results for the tinyArray
insert 44.721 μs
append 277.563 μs

Results for the smallArray
insert 50.024 μs
append 100.93 μs

Results for the mediumArray
insert 159.743 μs
append 139.175 μs

Results for largeArray
insert 6.27275 ms
append 864.654 μs

Results for the extraLargeArray
insert 818.055478 ms
append 3.744606 ms

write a paragraph that explains the pattern you see. How does each function "scale"? Which of the two functions scales better? How can you tell?

It looks like Insert(.push()) is a faster run time for both small and large arrays. The getSizedArray function has a better run time because the size of the function has been allocated in advance. .unshift() has a linear space complexity

For extra credit, do some review / research on why the slower function is so slow, and summarize the reasoning for this

The difference is signicant for all arrays Reading into the reasons why I have found that because .push() adds to the end of the array it rarely needs to reallocate memory and copy data over to a larger space. In comparison to .unshift() which adds data to the begining of the array and eventually runs out of space requiring the computer to allocate memory in order to create needed space.