

Array	Insert time (.unshift)	Append time (.push)
tinyArray(10)	72 µs	147.9 µs
SmallArray(100)	74.5 µs	169.8 µs
mediumArray(1000)	270.9 µs	237.7 µs
LargeArray(10,000)	13.5915 ms	870.4 µs
ExtraLargeArray(100,000)	1.7212451 s	4.6202 ms

Summary

The function that uses .push (append) is much faster than the function that uses .unshift(insert). The reason is because .push simply puts the new number at the end of the array maintaining the original positions of the other numbers in the array. Unshift will add the number to the beginning of the array requiring all the other numbers to reassign their index values.

While the insert function might initially be faster and simpler as the size of the array increases the append function moves much faster as the size of the array increases.