

Week 7 Assessment

Results for the extraLargeArray

insert 1.5007117 s

append 5.953 ms

Results for the largeArray

insert 13.4478 ms

append 886.1 μ s

Results for the mediumArray

insert 256.1 μ s

append 198.5 μ s

Results for the smallArray

insert 92 μ s

append 233.7 μ s

Results for the tinyArray

insert 60 μ s

append 146.9 μ s

It's simple to observe that with each array increase, the run time for each function also increases. However, the insert method time increases exponentially when compared to the append run time. While append starts off with tinyArray taking more time to complete than the insert method, insert soon surpasses append in the mediumArray function. Append scales more effectively than insert.

This is likely because append attaches a new value to the end of an array, while insert has to shift each value down and then add the new value to the front of the array. Because of this, the time increases hugely the larger the array becomes.