Results for the extraLargeArray
insert 942.8489 ms
append 6.7011 ms
Results for the largeArray
insert 9.7364 ms
append 515.2 µs
Results for the mediumArray
insert 1.2288 ms
append 1.2846 ms
Results for the smallArray
insert 8.7 µs
append 4.1 µs

The doublerAppend function scales fairly well. The difference from the tinyArray to the extraLargeArray is roughly 5.34001 milliseconds. It has a slow increase as the array gets larger. The doublerInsert function doesn't scale well at all. It has a much more rapid increase than the doublerAppend array. From the tinyArray to the extraLargeArray the time difference is 2.13500298 seconds. This means that by the time the array is the extra large size with data, the doublerInsert function is about 400 times less efficient than the doublerAppend.