Runtime Analysis

- Results for the extraLargeArray
- insert 1.396158958 s
- append 7.878625 ms
- Results for the tinyArray
- insert 113.416 µs
- append 72.458 µs
- Results for the smallArray
- insert 141.625 µs
- append 86.125 µs
- Results for the mediumArray
- insert 273.333 µs
- append 128.875 µs
- Results for the largeArray
- insert 10.67975 ms
- append 641.833 µs
- Results for the extraLargeArray
- insert 1.289785334 s
- append 2.643209 ms

1. Read over the results, and 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 the array size grows larger.
   - Each function insert scales by growing larger and increasing.
   - The append also increases with larger array styles.

Extra Credit

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

- The slower function is the insert function which becomes slower as the array size increases. It could be because of the way that the arrays are structured that is making it slow.