| Time Size comparison | Insert Time | Append Time |
| --- | --- | --- |
| tinyArray | 42.6 μs | 104.5 μs |
| smallArray | 56.7 μs | 133.8 μs |
| mediumArray | 213.3 μs | 176.2 μs |
| largeArray | 9.6755 ms | 710.8 μs |
| extraLargeArray | 941.664 ms | 3.3122 ms |

Initially, it is faster to insert rather than append. Once it got to the medium array the amount of data had increased to an amount that caused it to take longer to complete the function. The insert function runs at O(n^2) while the append function runs at O(n). The insert function would be the right choice for runtime efficiency if the amount of data would never reach the size of the medium array. However, as a company grows, the more data they take in and they can’t limit itself to such a small amount of data to process, so for scaling, the append function scales much better as larger amounts of data are sent through.