|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| tinyArray | smallArray | mediumArray | largeArray | Extra-large array |
|  |  |  |  |  |
| insert 34.5 μs | insert 53.9 μs | insert 177.6 μs | insert 7.7913 ms | insert 1.1162649 s |
| append 173 μs | append 120.9 μs | append 156.1 μs | append 510.6 μs | append 3.8939 ms |

Both Functions runtime increases as size of array increases. It looks like insert function is faster run time for both TinyArray and smallarray. Append function is faster for mediumArray, largeArray , extralargeArray. As we start to scale array size, the insert function becomes slow and Append stays Fast as it scales up.

The append function is faster because push () has to add an element at the end of the array, so none of the Array elements' indexes has to change.

While Insert function is slow because unshift function has to add an element at the start and then move each item in the array to next position, making runtime more.