|  | insert | append |
| --- | --- | --- |
| tiny | 39.1us | 84.2 us |
| small | 45.8 us | 91.9us |
| medium | 148.2 us | 105.2 us |
| large | 7 ms | 400 us |
| extralarge | 669.335 ms | 3.13 ms |

SO we can see that insert starts off a decent amount faster than our append function, but the true nature lies in the scale. As we start to scale, the two functions. Insert start to increase exponentially, while append stays relatively fast and small as it scales up.

This is because as we increase our insert function as we insert into an array using unshift it not only adds the first item to position 0 but now has to move every object one position down in the array while in and append it just has to focus on adding to the end.