

### **Assignment 3 Analysis Document**

1. Logan Cox was my partner and I submitted the source code.
2. We swapped roles at various points throughout the assignment, I personally prefer to type the code simply because I can type quickly, but I feel we swapped roles sufficiently.
3. Logan Cox is a fantastic partner to work with because him and I work very well together and I plan to work with him as often as I can.
4. We would not have had to make sure the array doubled in size whenever it got too big, we could simply have our List expand and contract as needed.
5. I think it is probably  $\log(n)$  because you don't actually need to check every single element in the array, assuming the array is sorted.
6. Yes it calculated to  $\log(n)$
7.  $\log(n)$ ,  $N^2$
8. We spent around five and a half hours completing this assignment.