CountStringFJ

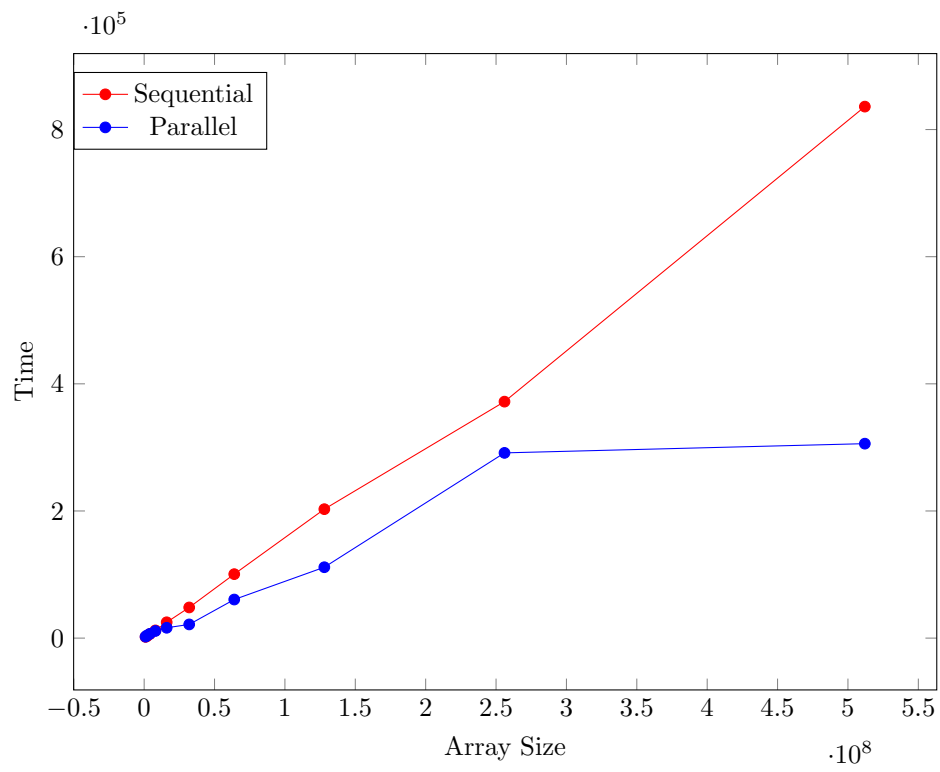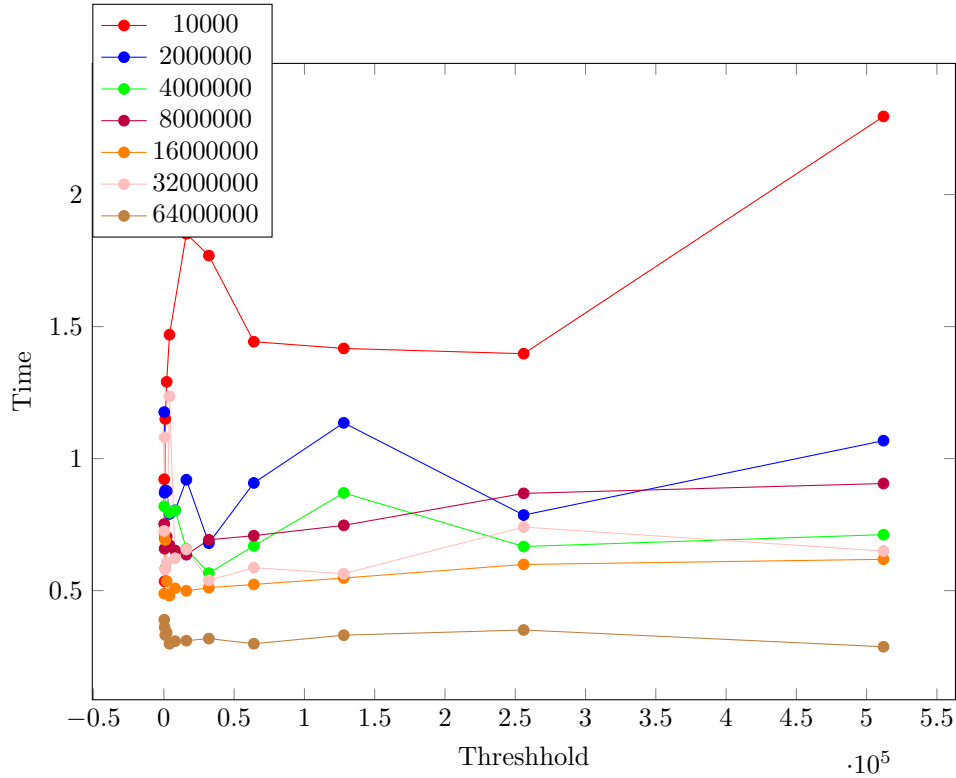## Asher Kirshtein

November 24, 2021

1 Time Comparison

2   Threshold Speeds

3   Analysis

From our data we can definitely see a significant increase in speed especially when the size of the array is increased. Overall the time increase isn't quite linear; However, when we are testing with a larger threshold the ratio flattens out. The ability to speed up our algorithms by allowing certain parts to run on different cores at the same time is limited. We aren't quite able to achieve a perfect linear boost in time. Since there is a cost of actually splitting up your data to run on different cores. That's why if you are running a Fork/Join with very few inputs often times it will be the case that a sequential method will outperform our Fork/Join in such a case in both speed and memory. So its very important to know when the divide and conquer is the right way to go. Nonetheless the speedup was definitely significant and should be noted even if it isn't perfectly linear.