Carl Johnson Homework 1: Report CSc 422 Patrick Homer 31 January 2018

The following timing test were run on the programs sortSeq, sortProcess, and sortThread while logged into the Cambridge server during a time of minimal CPU load. Each program was run several times using the provided biggestNumbers.txt file as input, and outlier results were excluded.

There are two charts on the following page showing the relationship to average running time vs. the number of processes and threads, respectively.

### sortSeq

# of processes	Runtime 1	Runtime 2	Runtime 3	Runtime Average
1	1.661637	1.687236	1.681411	1.676761

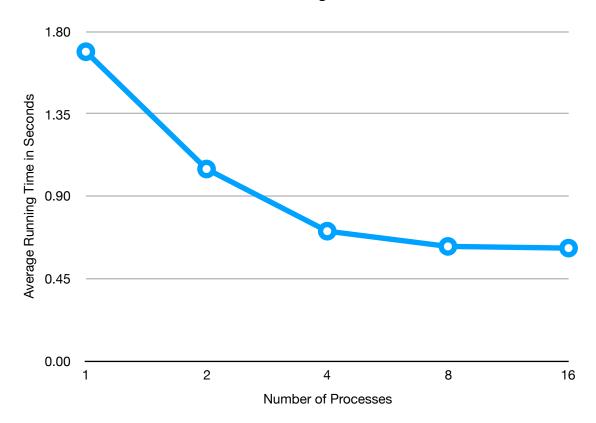
#### sortProcess

# of processes	Runtime 1	Runtime 2	Runtime 3	Runtime Average
1	1.686516	1.692686	1.690566	1.689923
2	1.049729	1.050012	1.046544	1.048762
4	0.707664	0.712004	0.706845	0.708838
8	0.624254	0.629516	0.623201	0.625657
16	0.615554	0.610634	0.622748	0.616312

#### sortThread

# of threads	Runtime 1	Runtime 2	Runtime 3	Runtime Average
1	1.676907	1.697207	1.679317	1.684477
2	1.012998	1.012153	1.010184	1.011778
4	0.604149	0.628204	0.622980	0.618444
8	0.495214	0.496226	0.502153	0.497864
16	0.510655	0.511771	0.509377	0.510601

## o sortProcess Running Times vs. Processes



# sortThread Running Times vs. Threads

