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Homework 1: Report
CSc 422
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     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

sortProcess Running Times vs. Processes

Average Running Time in Seconds

Number of Processes

sortThread Running Times vs. Threads

Average Running Time in Seconds

Number of threads