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CSCE 313.503

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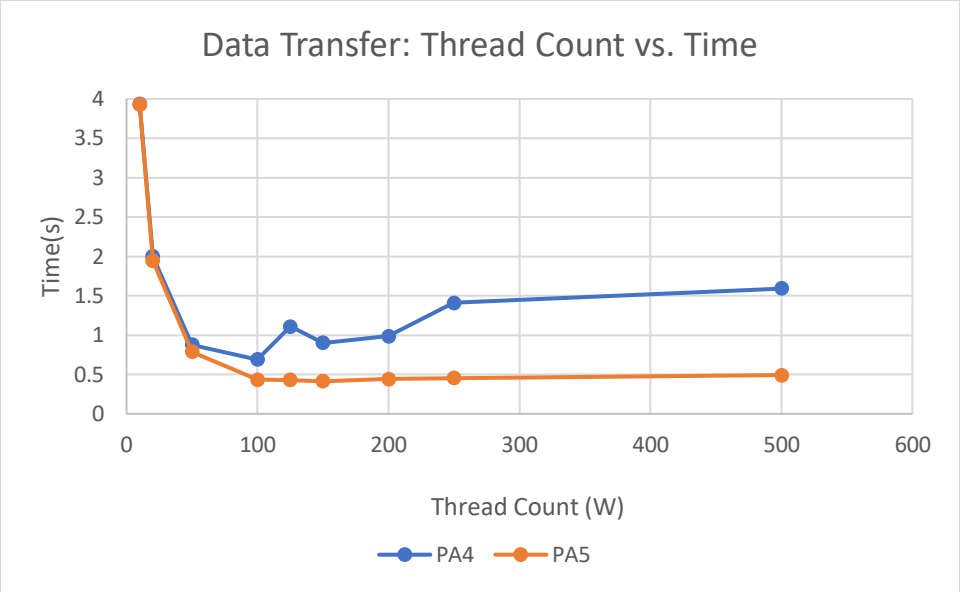
Programming Assignment Five Report

Graphs

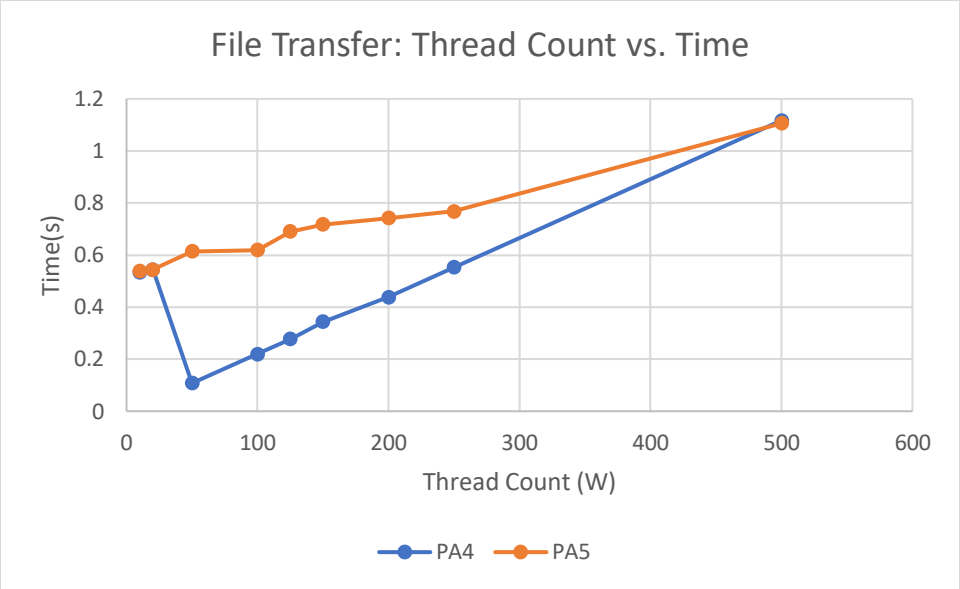
Data Transfer (N = 15000, B = 100)

Programming Assignment Four		Programming Assignment Five	
Thread Count	Time(s)	Thread Count	Time(s)
10	3.936340	10	3.928262
20	1.998774	20	1.940654
50	0.875128	50	0.788585
100	0.688599	100	0.434862
125	1.108962	125	0.429887
150	0.900557	150	0.412085
200	0.984176	200	0.440065
250	1.40765	250	0.452009
500	1.591703	500	0.491040



File Transfer (F = 10.csv, N = 15000, M = 256)

Programming Assignment Four		Programming Assignment Five	
Thread Count	Time(s)	Thread Count	Time(s)
10	0.53310	10	0.53900
20	0.54442	20	0.54413
50	0.107689	50	0.61420
100	0.220200	100	0.61972
125	0.277260	125	0.69112
150	0.343989	150	0.71814
200	0.439082	200	0.74188
250	0.553197	250	0.76768
500	1.116977	500	1.105834



Report

When the command is data requests, the runtime of PA5 is not slower but in fact faster at some points than PA4's runtime. While PA5 is faster at requesting data, the point of diminishing return for both programming assignments is about the same (approximately one hundred to two hundred thread count). When the command is file transfers, the runtime of PA5 is roughly the same as PA4's runtime. Even though PA4 has a drastic drop in runtime between twenty and fifty thread count that PA5 does not have, both programming assignments follow the same pattern of increasing slowly until they have the same runtime at around five hundred thread count.

Demo Video Link:

https://drive.google.com/file/d/1ispCaNDaeJvYeUnq3IFveoYmSf4houvn/view?usp=sharing