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CSCE 313.503

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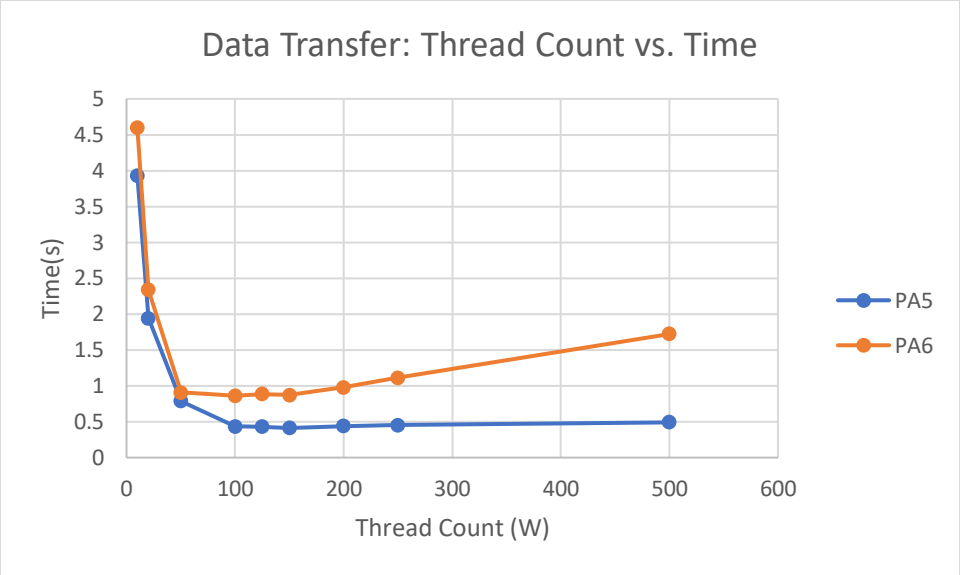
Programming Assignment Six Report

Graphs

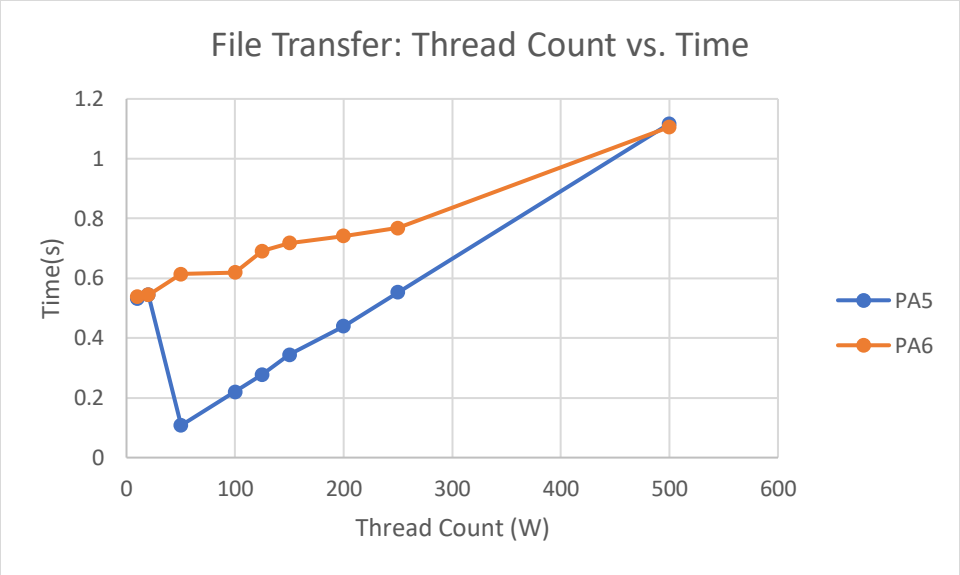
Data Transfer (N = 15000, B = 100)

Programming Assignment Five		Programming Assignment Six	
Thread Count	Time(s)	Thread Count	Time(s)
10	3.928262	10	4.59553
20	1.940654	20	2.34018
50	0.788585	50	0.909426
100	0.434862	100	0.862668
125	0.429887	125	0.887209
150	0.412085	150	0.873510
200	0.440065	200	0.978641
250	0.452009	250	1.111835
500	0.491040	500	1.724717



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

Programming Assignment Five		Programming Assignment Six	
Thread Count	Time(s)	Thread Count	Time(s)
10	0.53900	10	0.097076
20	0.54413	20	0.099974
50	0.61420	50	0.128894
100	0.61972	100	0.210868
125	0.69112	125	0.229032
150	0.71814	150	0.148518
200	0.74188	200	0.293187
250	0.76768	250	0.380831
500	1.105834	500	0716478



Report

There is a difference between PA5 and PA6 when it comes to runtimes with varying w (thread count). I believe that I am seeing this difference because of two separate terminals being used at the same time which may cause more delay than PA5 since PA5 only required one. Since I was not able to get the two VMs working, I was only able to do this assignment on the localhost. The runtimes have the same pattern as PA5's FIFO but still do not match up. The point of diminishing return for both file transfer and data transfer is between one hundred to two hundred threads. This is like PA5 in data transfer but not in file transfer.

Demo Video Link:

https://drive.google.com/file/d/12O0w7nA-RV6H6kd-TmPMTlHUuK3z1CfI/view?usp=sharing