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COEN 177L - Thursday 2:15pm
Lab 9 - File Performance Measurement

Step 2:

	file100K	file1M	file10M	file100M
real	0.002s	0.003s	0.003s	0.002s
user	0.001s	0.001s	0.001s	0.000s
sys	0.000s	0.000s	0.000s	0.001s

Figure 1: Time spent reading each file

Step 3:

Buffer size = 100					
	file1.txt	file2.txt	file3.txt	file4.txt	file5.txt
real	0.003s	0.003s	0.097s	0.863s	19.530s
user	0.000s	0.001s	0.002s	0.039s	0.717s
sys	0.001s	0.000s	0.002s	0.056s	0.843s

Buffer size = 1,000					
	file1.txt	file2.txt	file3.txt	file4.txt	file5.txt
real	0.003s	0.002s	0.005s	0.021s	0.351s
user	0.000s	0.002s	0.000s	0.006s	0.094s
sys	0.001s	0.000s	0.003s	0.013s	0.254s

Buffer size = 10,000					
	file1.txt	file2.txt	file3.txt	file4.txt	file5.txt

real	0.002s	0.002s	0.004s	0.019s	0.268s
user	0.001s	0.000s	0.000s	0.003s	0.039s
sys	0.000s	0.001s	0.002s	0.012s	0.228s

Buffer size = 100,000					
	file1.txt	file2.txt	file3.txt	file4.txt	file5.txt
real	0.002s	0.002s	0.003s	0.013s	0.208s
user	0.001s	0.001s	0.000s	0.001s	0.007s
sys	0.000s	0.000s	0.002s	0.010s	0.198s

Step 4:

Buffer size = 100				
	file100K	file1M	file10M	file100M
real	0.005s	0.003s	0.003s	0.003s
user	0.000s	0.001s	0.000s	0.001s
sys	0.001s	0.000s	0.001s	0.000s

Buffer size = 1,000				
	file100K	file1M	file10M	file100M
real	0.004s	0.003s	0.003s	0.004s
user	0.001s	0.001s	0.000s	0.000s
sys	0.000s	0.000s	0.001s	0.001s

Buffer size = 10,000

	file100K	file1M	file10M	file100M
real	0.003s	0.003s	0.004s	0.003s
user	0.000s	0.000s	0.000s	0.001s
sys	0.001s	0.001s	0.001s	0.000s

Buffer size = 100,000				
	file100K	file1M	file10M	file100M
real	0.003s	0.003s	0.004s	0.004s
user	0.001s	0.001s	0.000s	0.001s
sys	0.000s	0.000s	0.001s	0.000s

Step 5:

Buffer size = 100																
	file100K				file1M				file10M				file100M			
threads	2	8	32	64	2	8	32	64	2	8	32	64	2	8	32	64
real(s)	.008	.019	.066	.120	.006	.018	.063	.112	.005	.016	.064	.117	.006	.020	.065	.118
user(s)	.000	.000	.001	.000	.000	.000	.001	.000	.000	.000	.000	.001.	.000	.002	.001	.001
sys(s)	.001	.002	.006	.012	.002	.002	.005	.009	.001	.002	.007	.010	.001	.001	.005	.011

Buffer size = 1,000																
	file100K				file1M				file10M				file100M			
threads	2	8	32	64	2	8	32	64	2	8	32	64	2	8	32	64
real(s)	.006	.019	.064	.116	.005	.021	.076	.118	.005	.020	.068	.120	.005	.019	.066	.122

user(s)	.001	.000	.001	.001	.001	.000	.000	.001	.001	.001	.000	.004	.000	.001	.003	.004
sys(s)	.001	.002	.006	.010	.000	.002	.007	.010	.000	.001	.007	.009	.001	.002	.004	.008

Buffer size = 10,000																
	file100K				file1M				file10M				file100M			
threads	2	8	32	64	2	8	32	64	2	8	32	64	2	8	32	64
real(s)	.006	.020	.075	.135	.005	.018	.064	.118	.006	.019	.071	.126	.005	.022	.068	.118
user(s)	.000	.001	.001	.003	.000	.002	.001	.000	.000	.001	.001	.001	.001	.000	.000	.000
sys(s)	.002	.002	.006	.008	.001	.000	.005	.011	.001	.002	.006	.012	.000	.002	.008	.012

Buffer size = 100,000																
	file100K				file1M				file10M				file100M			
threads	2	8	32	64	2	8	32	64	2	8	32	64	2	8	32	64
real(s)	.006	.024	.065	.116	.005	.017	.064	.116	.005	.019	.066	.122	.005	.020	.062	.121
user(s)	.000	.000	.002	.001	.000	.000	.001	.000	.000	.001	.000	.003	.001	.000	.004	.000
sys(s)	.002	.002	.005	.009	.001	.002	.005	.012	.001	.001	.006	.008	.000	.002	.002	.013