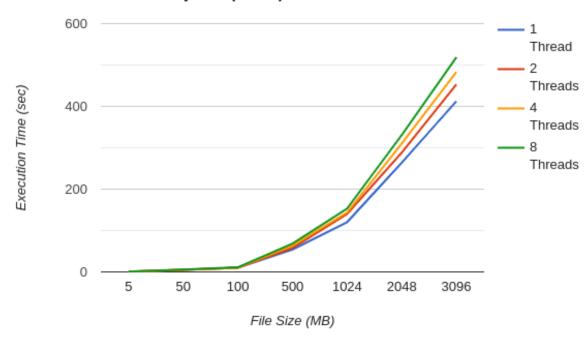
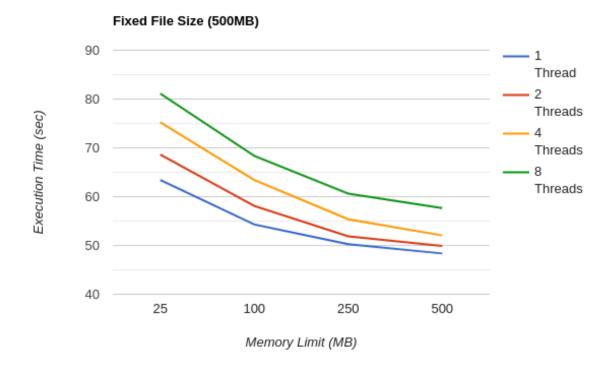
File Size	Time (sec)				
	1 Thread	2 Threads	4 Threads	8 Threads	
5MB	0.47	0.53	0.52	0.63	
50MB	4.89	4.88	5.22	5.7	
100MB	9.94	9.70	10.2	11.11	
500MB	54.29	58.09	63.41	68.37	
1GB	120.05	140.04	143.69	152.93	
2GB	264.06	288.43	310.49	330.84	
3GB	412.13	452.58	483.01	518.65	

Fixed Memory Limit (100MB)



As we are increasing the number of threads and file size the execution time is increasing. It's probably because of increased number of chunks(subfiles) which are created when we increase the threads.

Memory Limit	Time (sec)				
	1 Thread	2 Threads	4 Threads	8 Threads	
25 MB	63.42	68.62	75.23	81.13	
100 MB	54.29	58.09	63.41	68.37	
250 MB	50.24	51.88	55.38	60.61	
500 MB	48.36	49.89	52.06	57.67	



Once again on increasing the memory limit the execution time is decreasing, its because with constrained memory we have to create many chunks of small size to accommodate the memory. As we increase the memory limit the chunks number keeps decreasing. Same with the threads, more threads meaning more constrained memory for the phase 1 and thus more chunks.