

# Assignment Report

CSCE-313-512

## PA5 High Concurrency without many Threads

Video Demo – [https://youtu.be/0bt\\_8bw-Oc](https://youtu.be/0bt_8bw-Oc)

### Data Transfer

#### Different W for Data Transfer

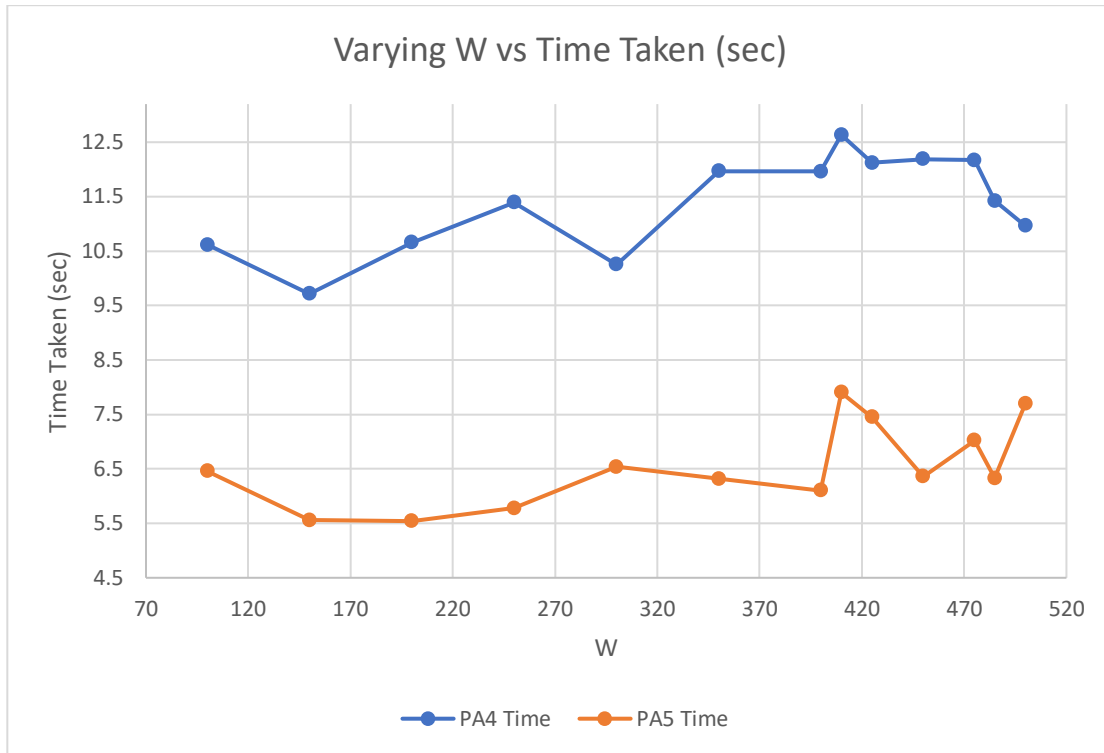
./client -n 15000 -p 15 -b 1024 -w \_\_\_\_ as given below

W Size	Time Taken (sec)
5	126.65
10	62.16
20	31.97
50	12.44
100	6.46
150	5.56
200	5.54
250	5.78
300	6.54
350	6.32
400	6.10
450	6.36
500	7.70

General Observation for Different W (worker thread):

The worker threads give steady results but for worker threads of around 250 to 500, it seems to be increasing in time performance. So, the DIMINISHING point is around 250 w-threads. The time difference between PA4 and PA5 is significant. As you can see from the graph below, the time difference is quite large for the running time of these functions.

Graph:



## File Transfer

### Varying W for File Transfer

./client -f 15.csv -b 1024 -w \_\_\_\_\_ as shown below

Varying Worker Threads	Time Taken (sec)
50	0.38
150	0.41
250	0.82
350	0.94
450	1.2630
550	2.71
1000	1.112
2000	7.12

General Observation: As shown from the table above and graph below, the more the number of worker threads, it seems that the runtime is not varying too from PA4 and PA5 although the PA5 runtimes are a little bit faster than PA4.

Graph:

