Pemrograman Jaringan B

Laporan Performance Test

Tugas 9

Ditulis Oleh:

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Dokumentasi Tugas 9

Tugas 9:

1. Pull update terakhir
2. Jalankan kedua model tersebut
    a. Server_async_http.py di port 45000
    b. Server_thread_http.py di port 46000
3. Ujicobalah dengan apache benchmark untuk 1000 request dan konkurensi yang bervariasi
4. Buatlah tabel untuk melaporkan hasilnya

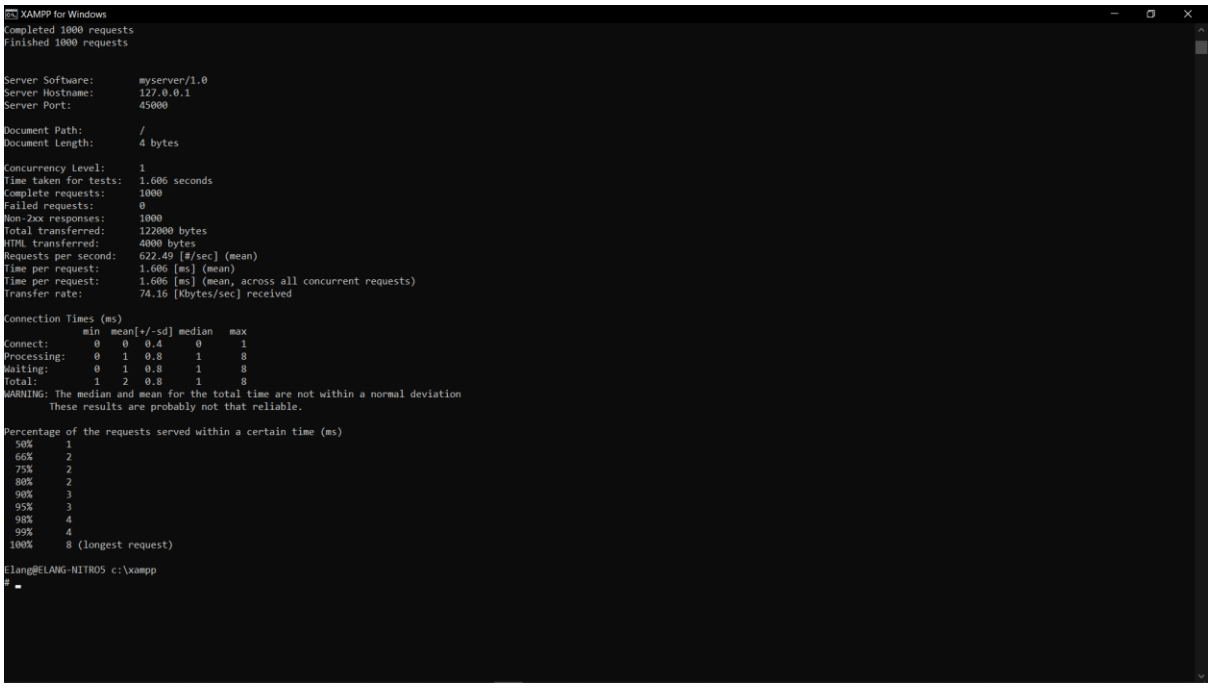
Jawaban:

Tabel Hasil Benchmark **Asynchronous Server**.

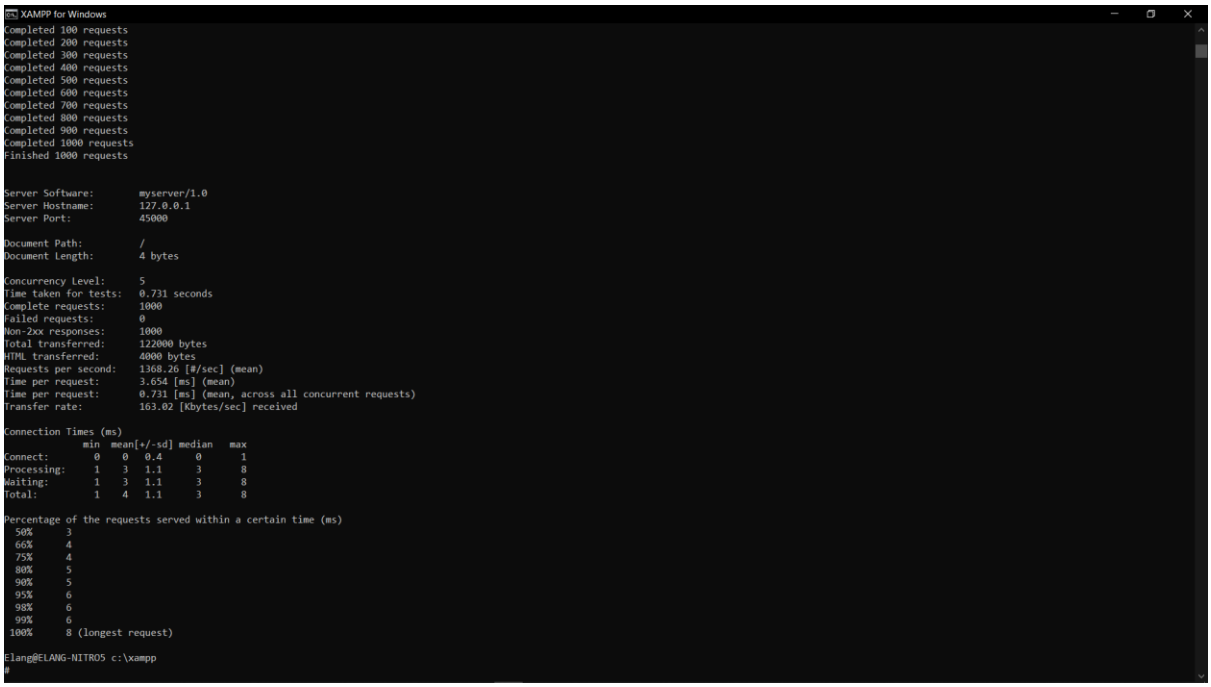
No test	Concurrency level	Time taken for test [seconds]	Complete request	Failed request	Total transferred [bytes]	Request per second [#/sec]	Time per request [ms]	Transfer rate [Kbytes/sec]
1	1	1.606	1000	0	122000	622.49	1.606	74.16
2	5	0.731	1000	0	122000	1368.26	3.654	163.02
3	10	72.321	1000	0	122000	13.83	723.208	1.65
4	50	63.810	1000	0	122000	15.67	3190.521	1.87
5	100	64.813	1000	0	122000	15.43	6481.274	1.84
6	250	65.999	1000	0	122000	15.15	16499.863	1.81
7	500	66.286	1000	0	122000	14.96	33413.018	1.78
8	1000	70.832	1000	0	122000	14.12	70832.143	1.68

Screenshots:

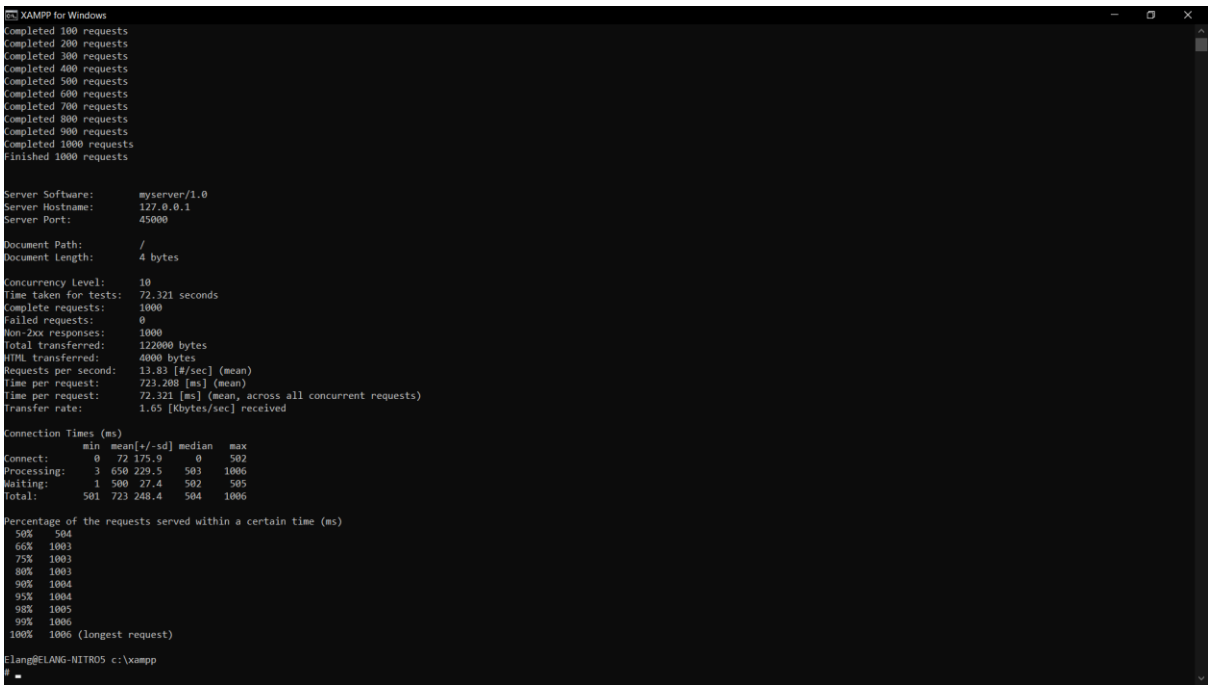
Concurrency Level 1



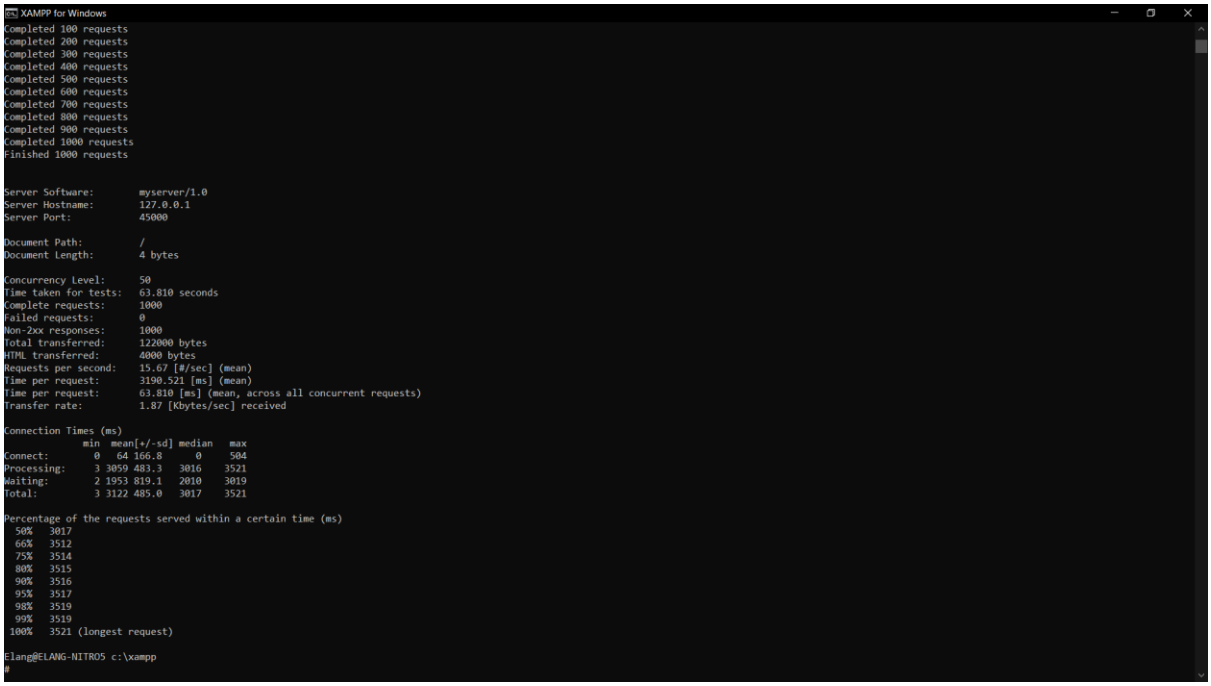
Concurrency Level 5



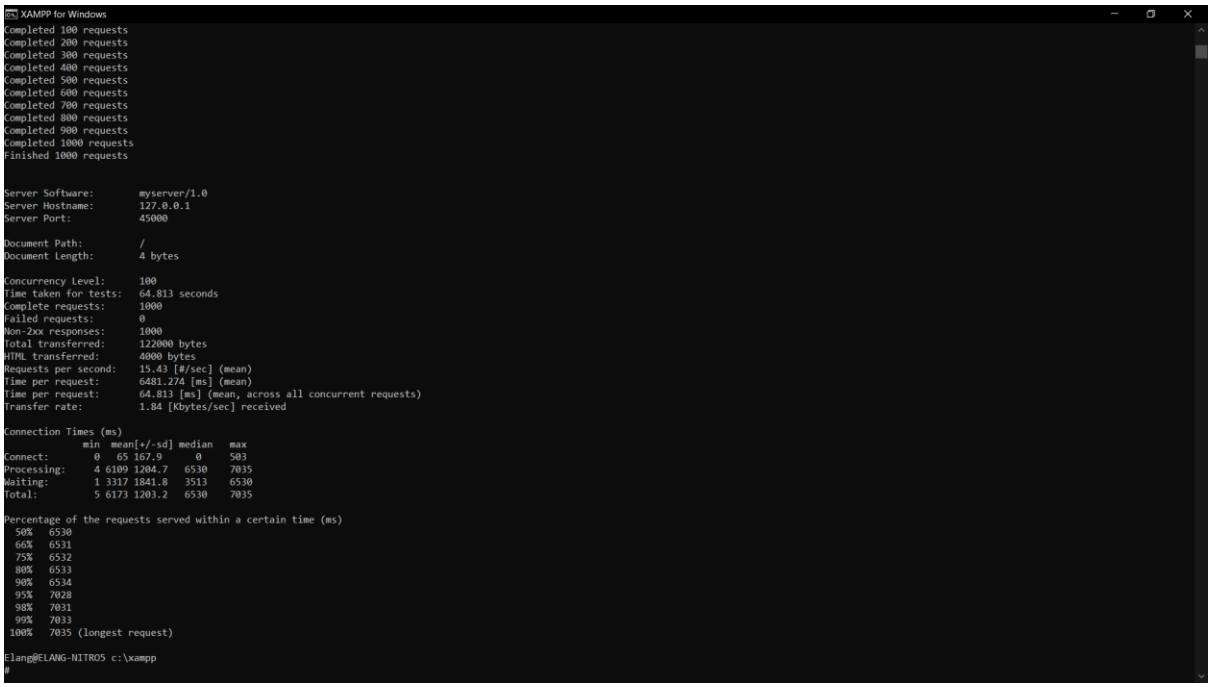
Concurrency Level 10



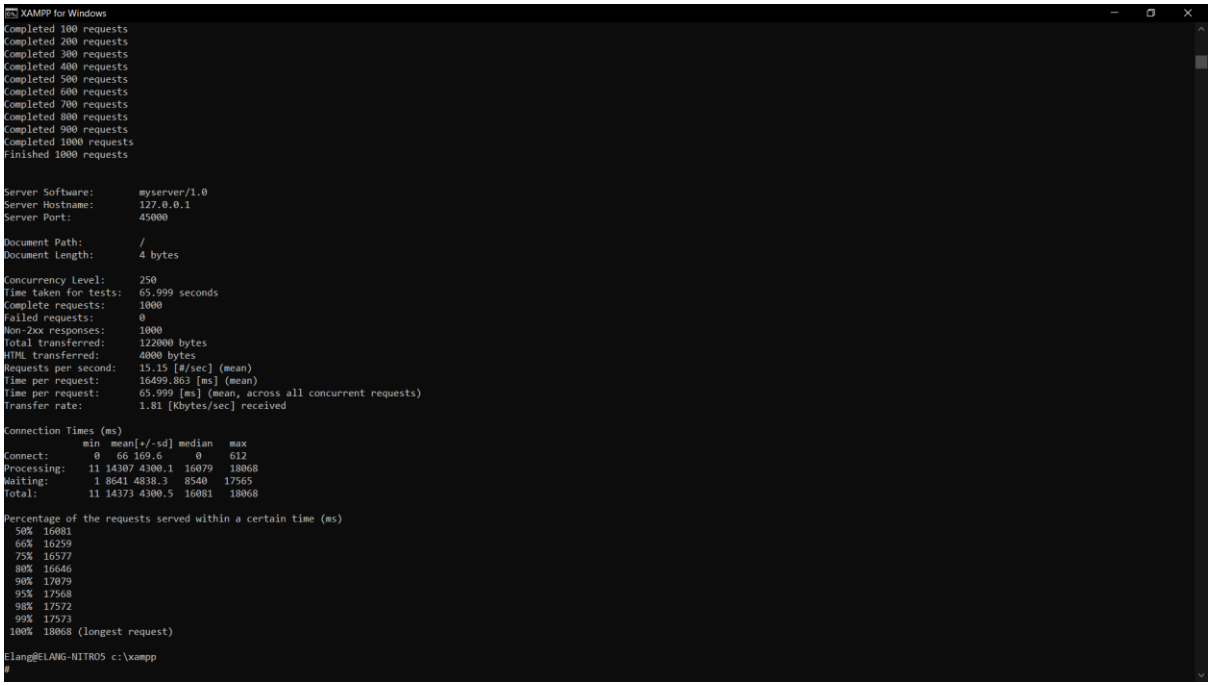
Concurrency Level 50



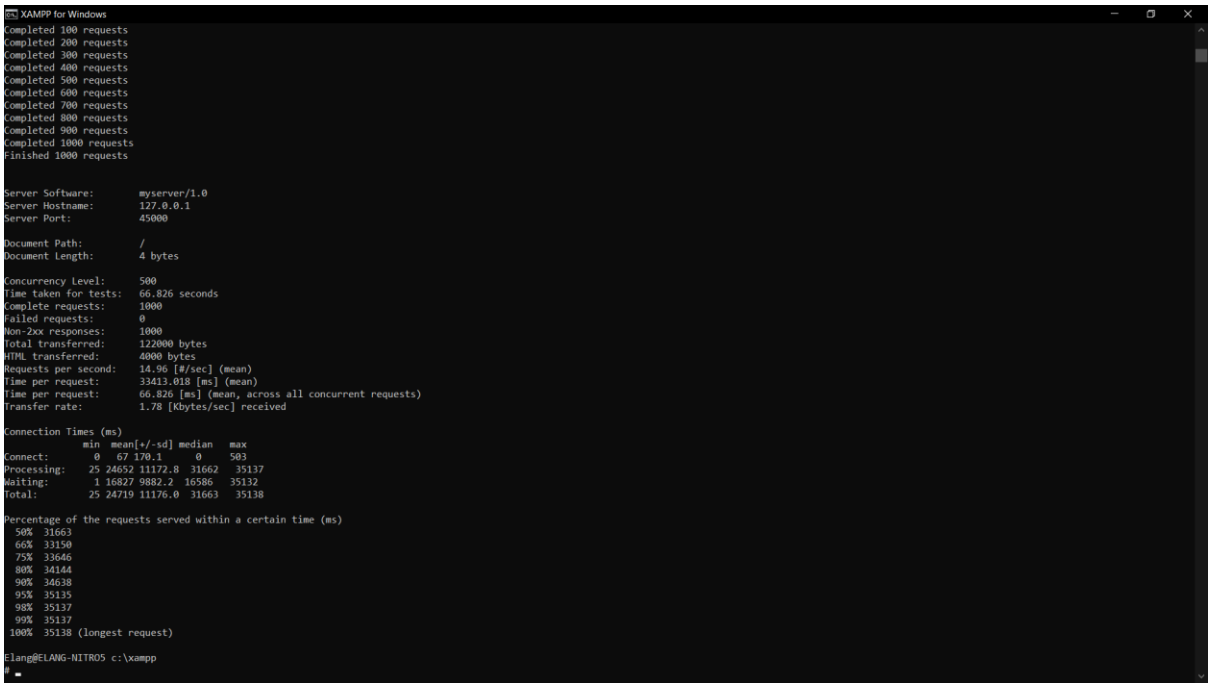
Concurrency Level 100



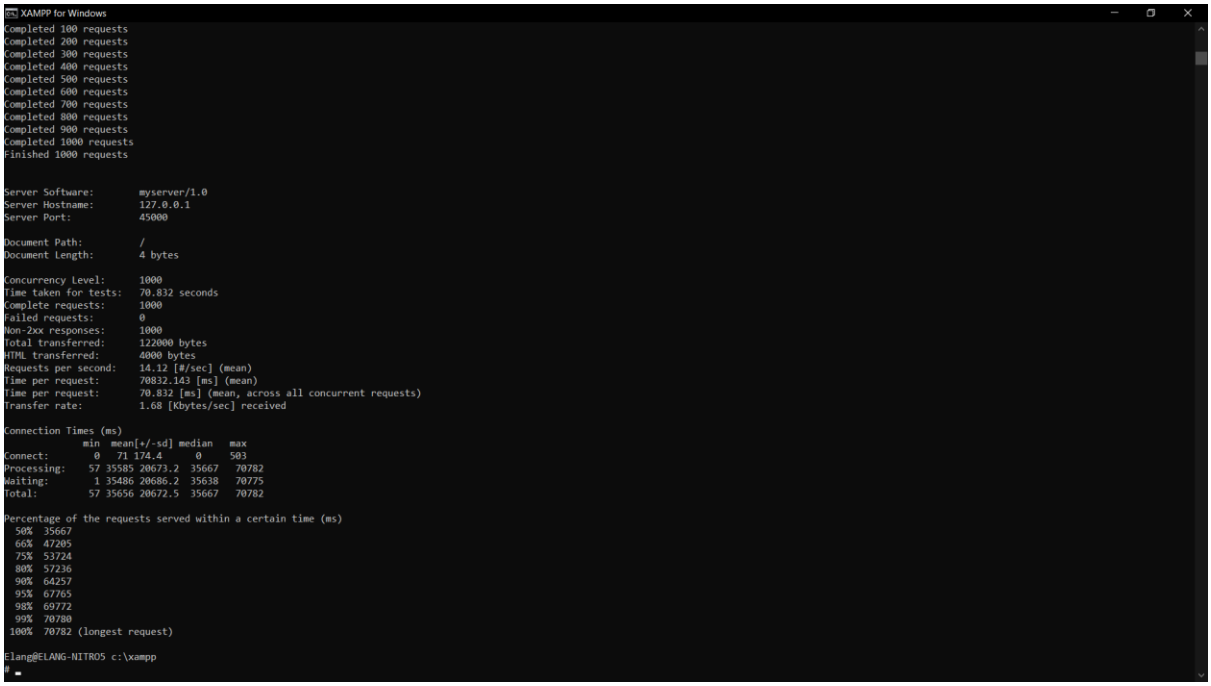
Concurrency Level 250



Concurrency Level 500



Concurrency Level 1000

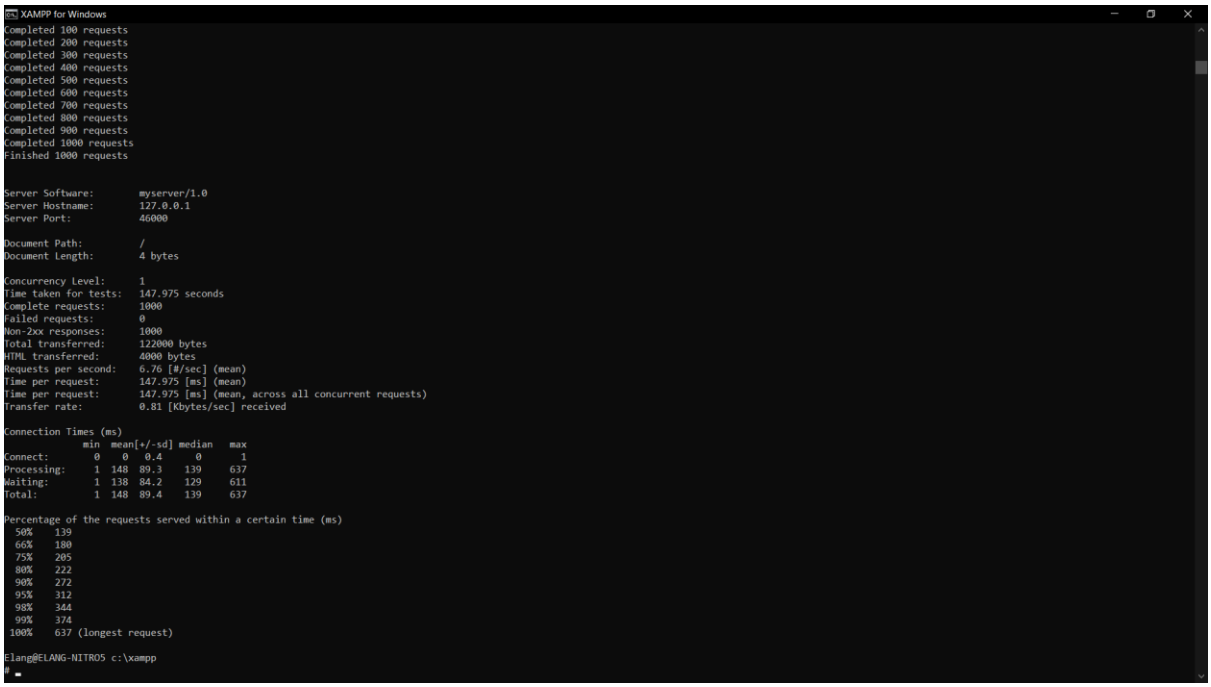

XAMPP for Windows
Completed 100 requests
Completed 200 requests
Completed 300 requests
Completed 400 requests
Completed 500 requests
Completed 600 requests
Completed 700 requests
Completed 800 requests
Completed 900 requests
Completed 1000 requests
Finished 1000 requests
Server Software: myserver/1.0
Server Hostname: 127.0.0.1
Server Port: 45000
Document Path: /
Document Length: 4 bytes
Concurrency Level: 1000
Time taken for tests: 70.832 seconds
Complete requests: 1000
Failed requests: 0
Non-2xx responses: 1000
Total transferred: 122000 bytes
HTML transferred: 4000 bytes
Requests per second: 14.12 [#/sec] (mean)
Time per request: 70832.143 [ms] (mean)
Time per request: 70.832 [ms] (mean, across all concurrent requests)
Transfer rate: 1.68 [Kbytes/sec] received
Connection Times (ms)
min mean[+/-sd] median max
Connect: 0 71 174.4 0 503
Processing: 57 35585 20673.2 35667 70782
Waiting: 1 35486 20686.2 35638 70775
Total: 57 35656 20672.5 35667 70782
Percentage of the requests served within a certain time (ms)
50% 35667
66% 47205
75% 53724
80% 57236
90% 64257
95% 67765
98% 69772
99% 70780
100% 70782 (longest request)
Elang@ELANG-NITRO5 c:\xampp
#

Tabel Hasil Benchmark **Thread Server**.

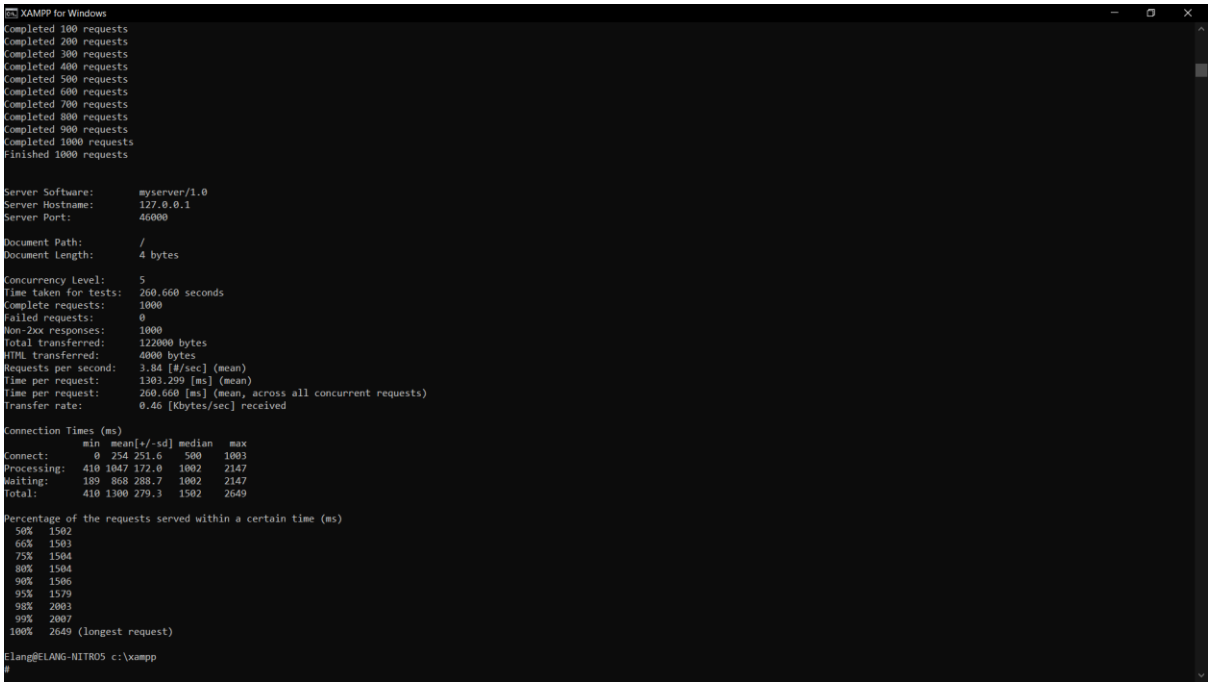
No test	Concurrency level	Time taken for test [seconds]	Complete request	Failed request	Total transferred [bytes]	Request per second [#/sec]	Time per request [ms]	Transfer rate [Kbytes/sec]
1	1	147.975	1000	0	122000	6.76	147.975	0.81
2	5	260.660	1000	0	122000	3.84	1303.299	0.46
3	10	250.351	1000	0	122000	3.99	2503.509	0.48
4	50	263.431	1000	0	122000	3.80	13171.547	0.45
5	100	391.736	1000	0	122000	2.55	39173.610	0.30
6	250	253.066	1000	0	122000	3.95	63266.570	0.47
7	500	250.360	1000	0	122000	3.99	125179.848	0.48
8	1000	259.717	1000	0	122000	3.85	259716.878	0.46

Screenshots:

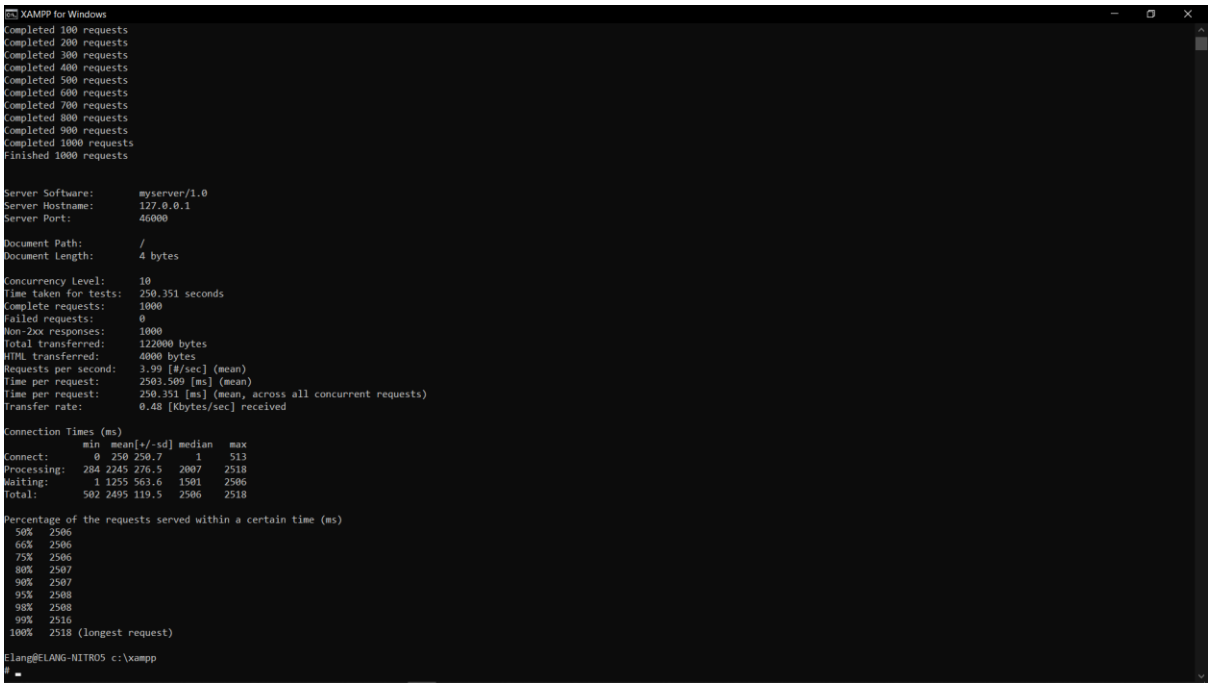
Concurrency Level 1



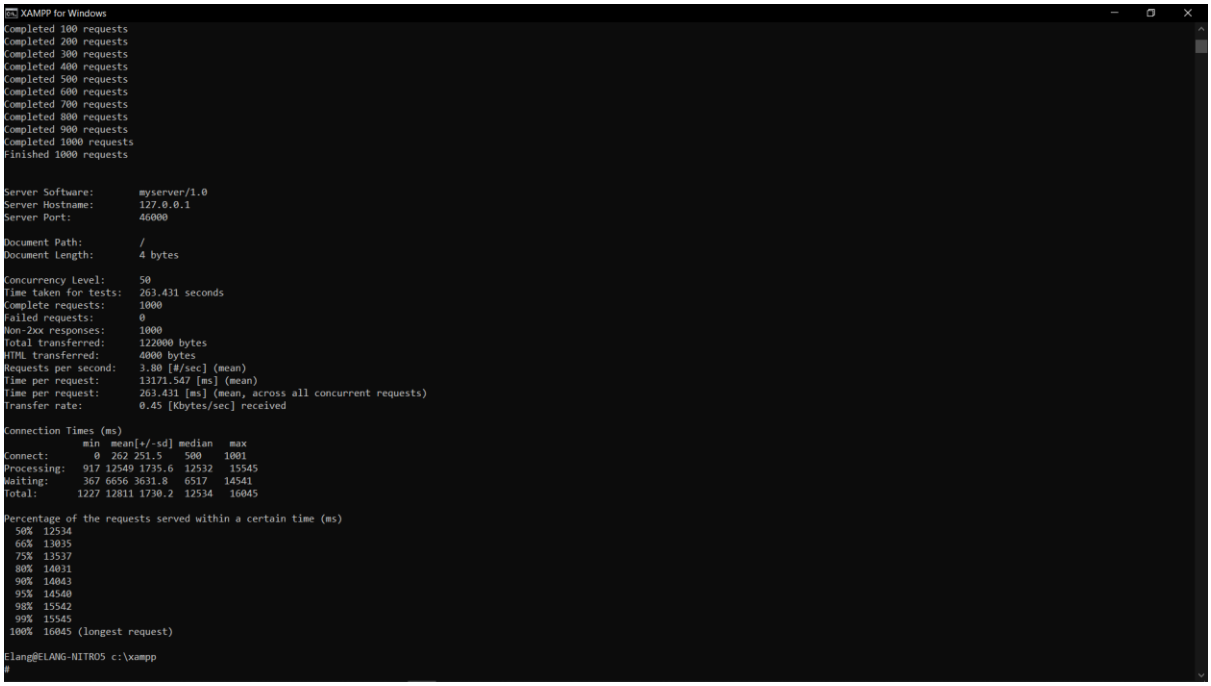
Concurrency Level 5



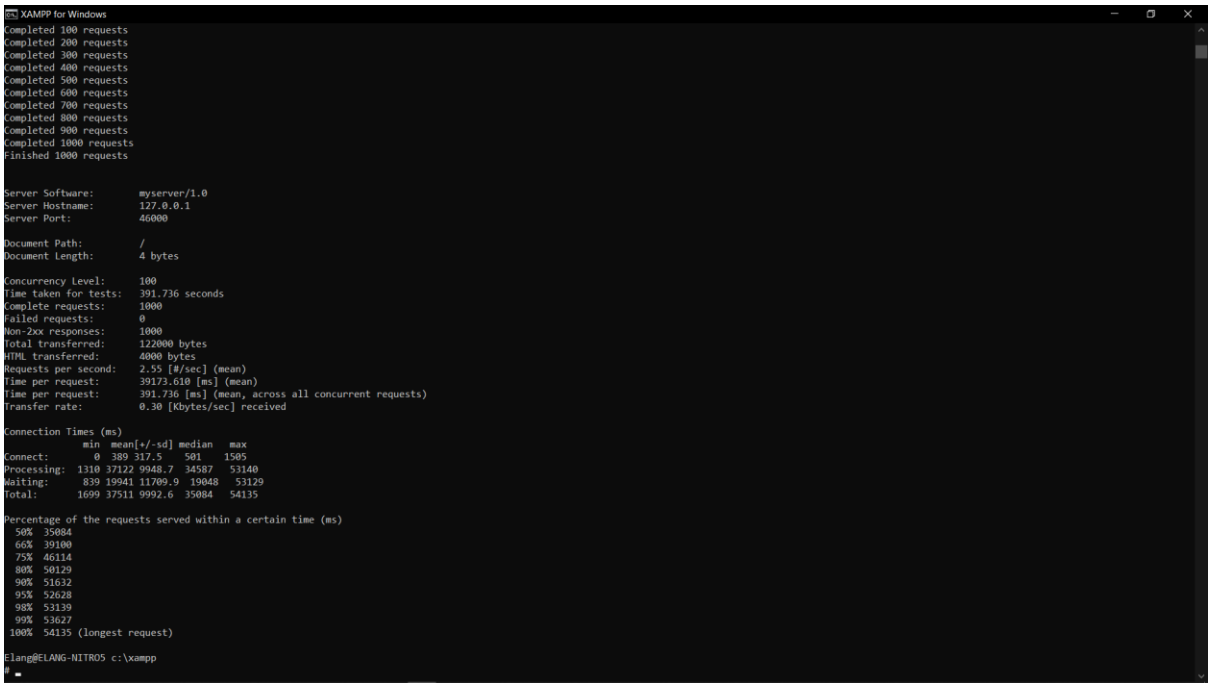
Concurrency Level 10



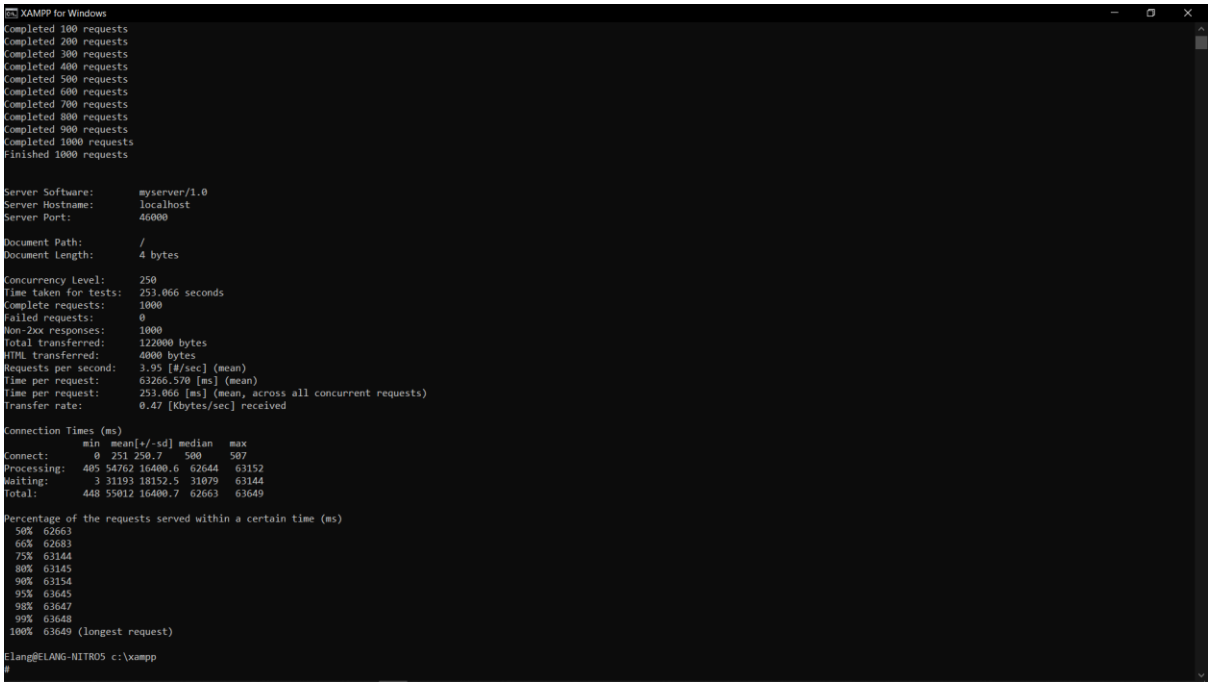
Concurrency Level 50



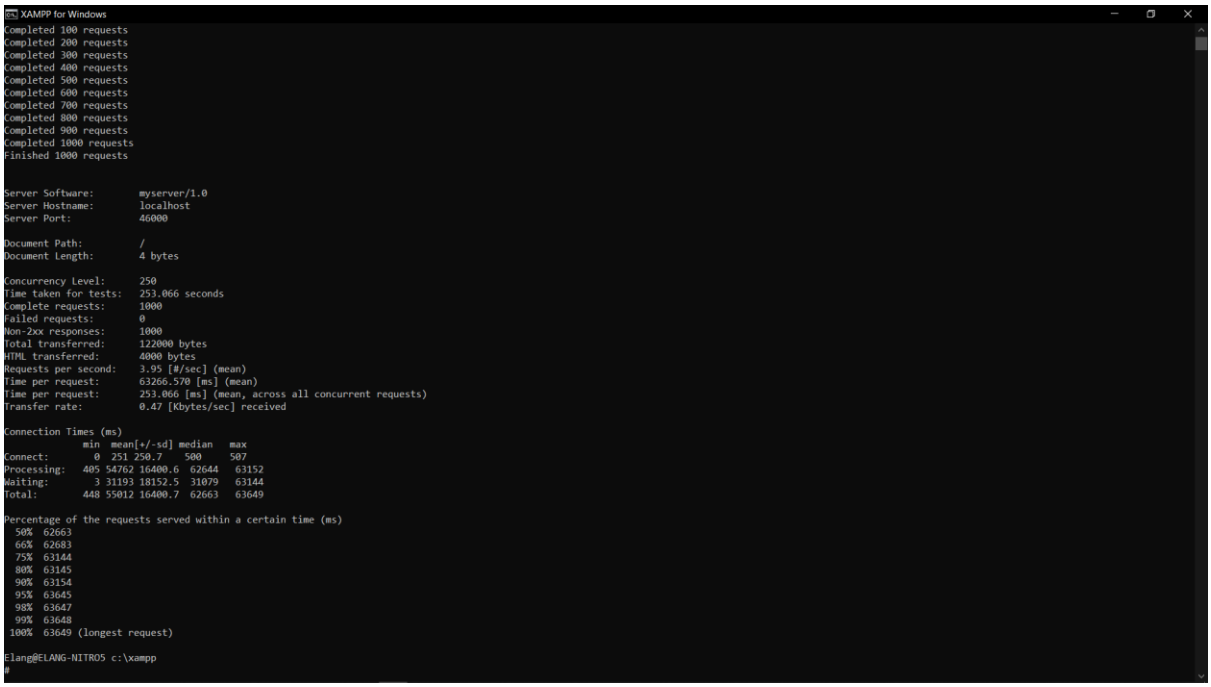
Concurrency Level 100



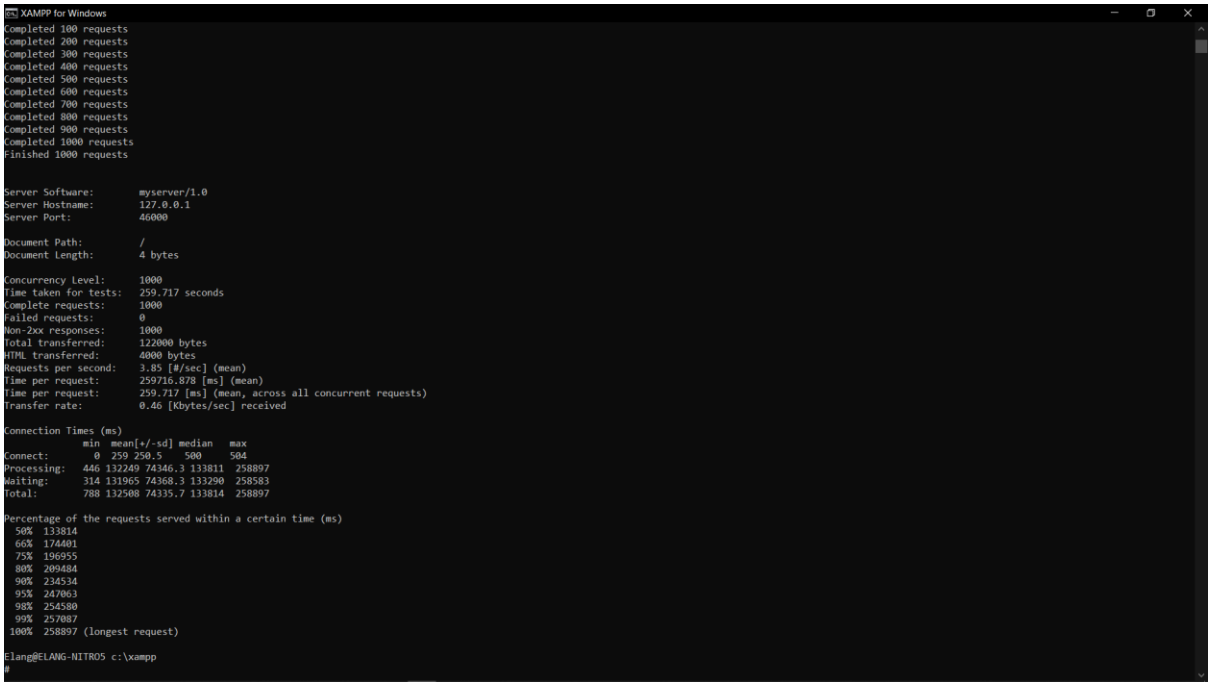
Concurrency Level 250



Concurrency Level 500



Concurrency Level 1000



Kesimpulan

Dari hasil benchmark yang telah dilakukan diatas, bisa disimpulkan bahwa penggunaan asynchronous server lebih baik daripada thread server.