Laporan Tugas 9

Pemrograman Jaringan B

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2020

A. Parameter Test

Jumlah Request : 1000

Konkurensi : 1, 5, 10, 25, 50, 75 100

B. Hasil Performance Test

1. Asynchronous Server

No.	Concurrency Level	Time Taken For Rest (seconds)	Complete Request	Failed Request	Total Transferred	Request per second (#/sec)	Time per request (ms)	Transfer Rate
1	1	5.988	1000	0	122000	166.99	5.988	19.90
2	5	4.251	1000	0	122000	235.25	4.251	28.03
3	10	4.385	1000	0	122000	228.07	4.385	27.17
4	25	4.462	1000	0	122000	224.11	4.462	26.70
5	50	3.867	1000	0	122000	258.59	3.867	30.81
6	75	4.532	1000	0	122000	339.870	4.532	26.29
7	100	4.027	1000	0	122000	248.34	4.027	29.59

2. Threaded Server

No.	Concurrency Level	Time Taken For Rest (seconds)	Complete Request	Failed Request	Total Transferred	Request per second (#/sec)	Time per request (ms)	Transfer Rate
1	1	684.702	1000	0	122000	1.46	684.702	0.17
2	5	188.797	1000	0	122000	5.30	188.797	0.63
3	10	194.726	1000	0	122000	5.14	194.726	0.61
4	25	200.788	1000	0	122000	4.98	200.788	0.59
5	50	186.588	1000	0	122000	5.36	186.588	0.64
6	75	209.421	1000	0	122000	4.78	209.421	0.57
7	100	198.006	1000	0	122000	5.05	198.066	0.6

C. Kesimpulan

Berdasarkan hasil tes di atas, dapat dilihat bahwa asynchronous server dapat memproses lebih cepat dibandingkan Thread Server

D. Dokumentasi

a. Apache Benchmark Asynchronous 1000 request

- ## Concurrency 1

```
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Kana/2020/1 Kuliah/Progjar/Tugas/Tugas 9$ ab -n 1000 -c 1 http://127.0.0.1:45000/
This is ApacheBench, Version 2.3 <$Revision: 1807734 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking 127.0.0.1 (be patient)
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:      1
Time taken for tests:   5.988 seconds
Complete requests:      1000
Failed requests:        0
Non-2xx responses:      1000
Total transferred:      122000 bytes
HTML transferred:       4000 bytes
Requests per second:    166.99 [#/sec] (mean)
Time per request:       5.988 [ms] (mean)
Time per request:       5.988 [ms] (mean, across all concurrent requests)
Transfer rate:          19.90 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    0   0.4      0       6
Processing:     2    5   3.6      4      36
Waiting:        2    5   3.4      4      35
Total:          2    6   3.8      5      36

Percentage of the requests served within a certain time (ms)
  50%      5
  66%      7
  75%      8
  80%      9
  90%     10
  95%     12
  98%     16
  99%     19
 100%     36 (longest request)
```

- ## Concurrency 5

```
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Kana/2020/1 Kuliah//Progjar/Tugas/Tugas 9$ ab -n 1000 -c 5 http://127.0.0.1:45000/
This is ApacheBench, Version 2.3 <$Revision: 1807734 $>
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Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking 127.0.0.1 (be patient)
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:      5
Time taken for tests:   4.251 seconds
Complete requests:      1000
Failed requests:        0
Non-2xx responses:      1000
Total transferred:      122000 bytes
HTML transferred:       4000 bytes
Requests per second:    235.25 [#/sec] (mean)
Time per request:       21.254 [ms] (mean)
Time per request:       4.251 [ms] (mean, across all concurrent requests)
Transfer rate:          28.03 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    0   0.4      0       5
Processing:    12   21   5.8     19      47
Waiting:       12   20   5.8     19      47
Total:         13   21   5.9     19      48

Percentage of the requests served within a certain time (ms)
  50%     19
  66%     21
  75%     23
  80%     25
  90%     30
  95%     33
  98%     37
  99%     43
 100%     48 (longest request)
```

- ## Concurrency 10

```
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 9$ ab -n 1000 -c 10 http://127.0.0.1:45000/
This is ApacheBench, Version 2.3 <$Revision: 1807734 $>
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Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking 127.0.0.1 (be patient)
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:      10
Time taken for tests:   4.385 seconds
Complete requests:      1000
Failed requests:        0
Non-2xx responses:      1000
Total transferred:      122000 bytes
HTML transferred:       4000 bytes
Requests per second:    228.07 [#/sec] (mean)
Time per request:       43.847 [ms] (mean)
Time per request:       4.385 [ms] (mean, across all concurrent requests)
Transfer rate:          27.17 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    0   0.6      0       5
Processing:    11   43   8.9     41      79
Waiting:       11   43   8.9     41      79
Total:         16   43   8.9     42      79

Percentage of the requests served within a certain time (ms)
  50%     42
  66%     46
  75%     49
  80%     50
  90%     54
  95%     62
  98%     67
  99%     72
 100%     79 (longest request)
```

- ## Concurrency 25

```
  100%     79 (longest request)
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 9$ ab -n 1000 -c 25 http://127.0.0.1:45000/
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Benchmarking 127.0.0.1 (be patient)
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:      25
Time taken for tests:   4.462 seconds
Complete requests:      1000
Failed requests:        0
Non-2xx responses:      1000
Total transferred:      122000 bytes
HTML transferred:       4000 bytes
Requests per second:    224.11 [#/sec] (mean)
Time per request:       111.552 [ms] (mean)
Time per request:       4.462 [ms] (mean, across all concurrent requests)
Transfer rate:          26.70 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    1   1.0      0       7
Processing:    13  110  24.2    105     218
Waiting:       12  110  24.1    105     218
Total:         19  110  23.9    106     219
WARNING: The median and mean for the initial connection time are not within a normal deviation
        These results are probably not that reliable.

Percentage of the requests served within a certain time (ms)
  50%    106
  66%    114
  75%    118
  80%    120
  90%    137
  95%    165
```

- Concurrency 50

```
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rano/2020/1 Kuliah/Progjar/Tugas/Tugas 5$ ab -n 1000 -c 50 http://127.0.0.1:45000/
This is ApacheBench, Version 2.3 <$Revision: 1807734 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking 127.0.0.1 (be patient)
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:      50
Time taken for tests:   3.867 seconds
Complete requests:      1000
Failed requests:        0
Non-2xx responses:      1000
Total transferred:      122000 bytes
HTML transferred:       4000 bytes
Requests per second:    258.59 [#/sec] (mean)
Time per request:       193.356 [ms] (mean)
Time per request:       3.867 [ms] (mean, across all concurrent requests)
Transfer rate:          30.81 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    1   4.0      0       26
Processing:     4  186  29.2    185      242
Waiting:        4  186  29.2    185      242
Total:         30  187  26.4    186      242

Percentage of the requests served within a certain time (ms)
  50%    186
  66%    195
  75%    201
  80%    206
  90%    218
  95%    231
  98%    236
  99%    238
 100%    242 (longest request)
```

- Concurrency 75

```
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rano/2020/1 Kuliah/Progjar/Tugas/Tugas 5$ ab -n 1000 -c 75 http://127.0.0.1:45000/
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Benchmarking 127.0.0.1 (be patient)
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:      75
Time taken for tests:   4.532 seconds
Complete requests:      1000
Failed requests:        0
Non-2xx responses:      1000
Total transferred:      122000 bytes
HTML transferred:       4000 bytes
Requests per second:    220.67 [#/sec] (mean)
Time per request:       339.870 [ms] (mean)
Time per request:       4.532 [ms] (mean, across all concurrent requests)
Transfer rate:          26.29 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    3   9.2      0       64
Processing:     7  325  79.0    327      480
Waiting:        7  325  79.0    327      480
Total:         70  328  73.2    328      480

Percentage of the requests served within a certain time (ms)
  50%    328
  66%    352
  75%    368
  80%    380
  90%    428
  95%    450
  98%    469
  99%    474
 100%    480 (longest request)
```

- Concurrency 100


```
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 2$ ab -n 1000 -c 100 http://127.0.0.1:45000/
This is ApacheBench, Version 2.3 <$Revision: 1807734 $>
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Benchmarking 127.0.0.1 (be patient)
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:      100
Time taken for tests:   4.027 seconds
Complete requests:      1000
Failed requests:        0
Non-2xx responses:      1000
Total transferred:      122000 bytes
HTML transferred:       4000 bytes
Requests per second:    248.34 [#/sec] (mean)
Time per request:       402.672 [ms] (mean)
Time per request:       4.027 [ms] (mean, across all concurrent requests)
Transfer rate:          29.59 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    3   6.9      0      35
Processing:    11  379  60.2    389     470
Waiting:        7  379  60.2    388     470
Total:         46  382  54.3    389     478

Percentage of the requests served within a certain time (ms)
  50%    389
  66%    398
  75%    403
  80%    407
  90%    419
  95%    429
  98%    450
  99%    460
 100%    478 (longest request)
```

b. Apache Benchmark Asynchronous 1000 request

- Concurrency 1


```
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 2$ sudo ab -n 1000 -c 1 http://127.0.0.1:46000/
[sudo] password for rwnaim:
This is ApacheBench, Version 2.3 <$Revision: 1807734 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking 127.0.0.1 (be patient)
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:            46000

Document Path:          /
Document Length:        4 bytes

Concurrency Level:      1
Time taken for tests:   684.702 seconds
Complete requests:      1000
Failed requests:        0
Non-2xx responses:      1000
Total transferred:      122000 bytes
HTML transferred:       4000 bytes
Requests per second:    1.46 [#/sec] (mean)
Time per request:       684.702 [ms] (mean)
Time per request:       684.702 [ms] (mean, across all concurrent requests)
Transfer rate:          0.17 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    0   0.1      0       2
Processing:     1  684 774.1    388    5196
Waiting:        1  638 723.1    369    5109
Total:          1  685 774.1    389    5197

Percentage of the requests served within a certain time (ms)
  50%    389
  66%    681
  75%    944
  80%   1185
  90%   1857
  95%   2392
  98%   2900
  99%   3271
 100%   5197 (longest request)
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 2$
```

- Concurrency 5

```
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 4$ sudo ab -n 1000 -c 5 -r -k -s 999999 http://127.0.0.1:46000/
[sudo] password for rwnaim:
This is ApacheBench, Version 2.3 <$Revision: 1807734 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking 127.0.0.1 (be patient)
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:            46000

Document Path:          /
Document Length:        4 bytes

Concurrency Level:      5
Time taken for tests:   188.797 seconds
Complete requests:      1000
Failed requests:        0
Non-2xx responses:      1000
Keep-Alive requests:    0
Total transferred:      122000 bytes
HTML transferred:       4000 bytes
Requests per second:    5.30 [#/sec] (mean)
Time per request:       943.985 [ms] (mean)
Time per request:       188.797 [ms] (mean, across all concurrent requests)
Transfer rate:          0.63 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    0   0.1      0       1
Processing:     2  934 1013.0    586    5772
Waiting:        2  896 974.7     559    5381
Total:          3  934 1013.0    587    5772

Percentage of the requests served within a certain time (ms)
  50%    587
  66%    989
  75%   1332
  80%   1570
  90%   2290
  95%   3109
  98%   4191
  99%   4619
 100%   5772 (longest request)
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 4$
```

- Concurrency 10

```
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 4$ sudo ab -n 1000 -c 10 -r -k -s 999999 http://127.0.0.1:46000/
[sudo] password for rwnaim:
This is ApacheBench, Version 2.3 <$Revision: 1807734 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking 127.0.0.1 (be patient)
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:            46000

Document Path:          /
Document Length:        4 bytes

Concurrency Level:      10
Time taken for tests:   194.726 seconds
Complete requests:      1000
Failed requests:        0
Non-2xx responses:      1000
Keep-Alive requests:    0
Total transferred:      122000 bytes
HTML transferred:       4000 bytes
Requests per second:    5.14 [#/sec] (mean)
Time per request:       1947.263 [ms] (mean)
Time per request:       194.726 [ms] (mean, across all concurrent requests)
Transfer rate:          0.61 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    0   0.2      0       3
Processing:     2 1921 2213.7   1139   12422
Waiting:        2 1876 2167.9   1104   12373
Total:          5 1922 2213.7   1139   12422

Percentage of the requests served within a certain time (ms)
  50%   1139
  66%   1925
  75%   2673
  80%   3092
  90%   5172
  95%   6973
  98%   8390
  99%   9824
 100%  12422 (longest request)
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 4$
```

- ## Concurrency 25

```
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 0$ sudo ab -n 1000 -c 25 -r -k -s 999999 http://127.0.0.1:46000/
[sudo] password for rwnaim:
This is ApacheBench, Version 2.3 <$Revision: 1807734 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking 127.0.0.1 (be patient)
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:            46000

Document Path:          /
Document Length:        4 bytes

Concurrency Level:      25
Time taken for tests:   200.788 seconds
Complete requests:      1000
Failed requests:        0
Non-2xx responses:      1000
Keep-Alive requests:    0
Total transferred:      122000 bytes
HTML transferred:       4000 bytes
Requests per second:    4.98 [#/sec] (mean)
Time per request:       5019.706 [ms] (mean)
Time per request:       200.788 [ms] (mean, across all concurrent requests)
Transfer rate:          0.59 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    0   0.5      0       6
Processing:     5 4796 4821.4   3102   19626
Waiting:        4 4746 4765.7   3069   19427
Total:          9 4796 4821.3   3102   19626

Percentage of the requests served within a certain time (ms)
  50%   3102
  66%   5293
  75%   7599
  80%   8150
  90%  13393
  95%  15705
  98%  16947
  99%  17594
 100%  19626 (longest request)
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 0$
```

- ## Concurrency 50

```
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 0$ sudo ab -n 1000 -c 50 -r -k -s 999999 http://127.0.0.1:46000/
[sudo] password for rwnaim:
This is ApacheBench, Version 2.3 <$Revision: 1807734 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking 127.0.0.1 (be patient)
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:            46000

Document Path:          /
Document Length:        4 bytes

Concurrency Level:      50
Time taken for tests:   186.588 seconds
Complete requests:      1000
Failed requests:        0
Non-2xx responses:      1000
Keep-Alive requests:    0
Total transferred:      122000 bytes
HTML transferred:       4000 bytes
Requests per second:    5.36 [#/sec] (mean)
Time per request:       9329.385 [ms] (mean)
Time per request:       186.588 [ms] (mean, across all concurrent requests)
Transfer rate:          0.64 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    1   1.6      0      12
Processing:     6 8440 7912.3   6176   34128
Waiting:        4 8400 7874.7   6167   33908
Total:         15 8440 7911.9   6176   34128

Percentage of the requests served within a certain time (ms)
  50%   6176
  66%   9831
  75%  12273
  80%  16309
  90%  21708
  95%  23580
  98%  28093
  99%  30024
 100%  34128 (longest request)
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 0$
```

- ## Concurrency 75

```
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 9$ sudo ab -n 1000 -c 75 -r -k -s 999999 http://127.0.0.1:46000/
[sudo] password for rwnaim:
This is ApacheBench, Version 2.3 <$Revision: 1807734 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking 127.0.0.1 (be patient)
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:            46000

Document Path:          /
Document Length:        4 bytes

Concurrency Level:      75
Time taken for tests:   209.421 seconds
Complete requests:      1000
Failed requests:        0
Non-2xx responses:      1000
Keep-Alive requests:    0
Total transferred:      122000 bytes
HTML transferred:       4000 bytes
Requests per second:    4.78 [#/sec] (mean)
Time per request:       15706.586 [ms] (mean)
Time per request:       209.421 [ms] (mean, across all concurrent requests)
Transfer rate:          0.57 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    1   2.4      0      14
Processing:     4 13404 14006.0   9373   60223
Waiting:        4 13361 13960.8   9299   60223
Total:         17 13405 14005.4   9374   60223

Percentage of the requests served within a certain time (ms)
  50%   9374
  66%  14025
  75%  17622
  80%  19828
  90%  33743
  95%  50451
  98%  54887
  99%  56518
 100%  60223 (longest request)
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 9$
```

- ## Concurrency 100

```
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 9$ sudo ab -n 1000 -c 100 -r -k -s 999999 http://127.0.0.1:46000/
[sudo] password for rwnaim:
Sorry, try again.
[sudo] password for rwnaim:
This is ApacheBench, Version 2.3 <$Revision: 1807734 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking 127.0.0.1 (be patient)
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:            46000

Document Path:          /
Document Length:        4 bytes

Concurrency Level:      100
Time taken for tests:   198.066 seconds
Complete requests:      1000
Failed requests:        0
Non-2xx responses:      1000
Keep-Alive requests:    0
Total transferred:      122000 bytes
HTML transferred:       4000 bytes
Requests per second:    5.05 [#/sec] (mean)
Time per request:       19806.571 [ms] (mean)
Time per request:       198.066 [ms] (mean, across all concurrent requests)
Transfer rate:          0.60 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    1   3.3      0      17
Processing:   136 15997 15976.3  11763   72079
Waiting:      134 15951 15926.6  11727   71331
Total:        151 15998 15975.3  11764   72079

Percentage of the requests served within a certain time (ms)
  50%  11764
  66%  20785
  75%  23691
  80%  26037
  90%  37414
  95%  50448
  98%  61453
  99%  67899
 100%  72079 (longest request)
rwnaim@WIJDANNAIM-LAPTOP:/mnt/d/1 Rana/2020/1 Kuliah/Progjar/Tugas/Tugas 9$
```