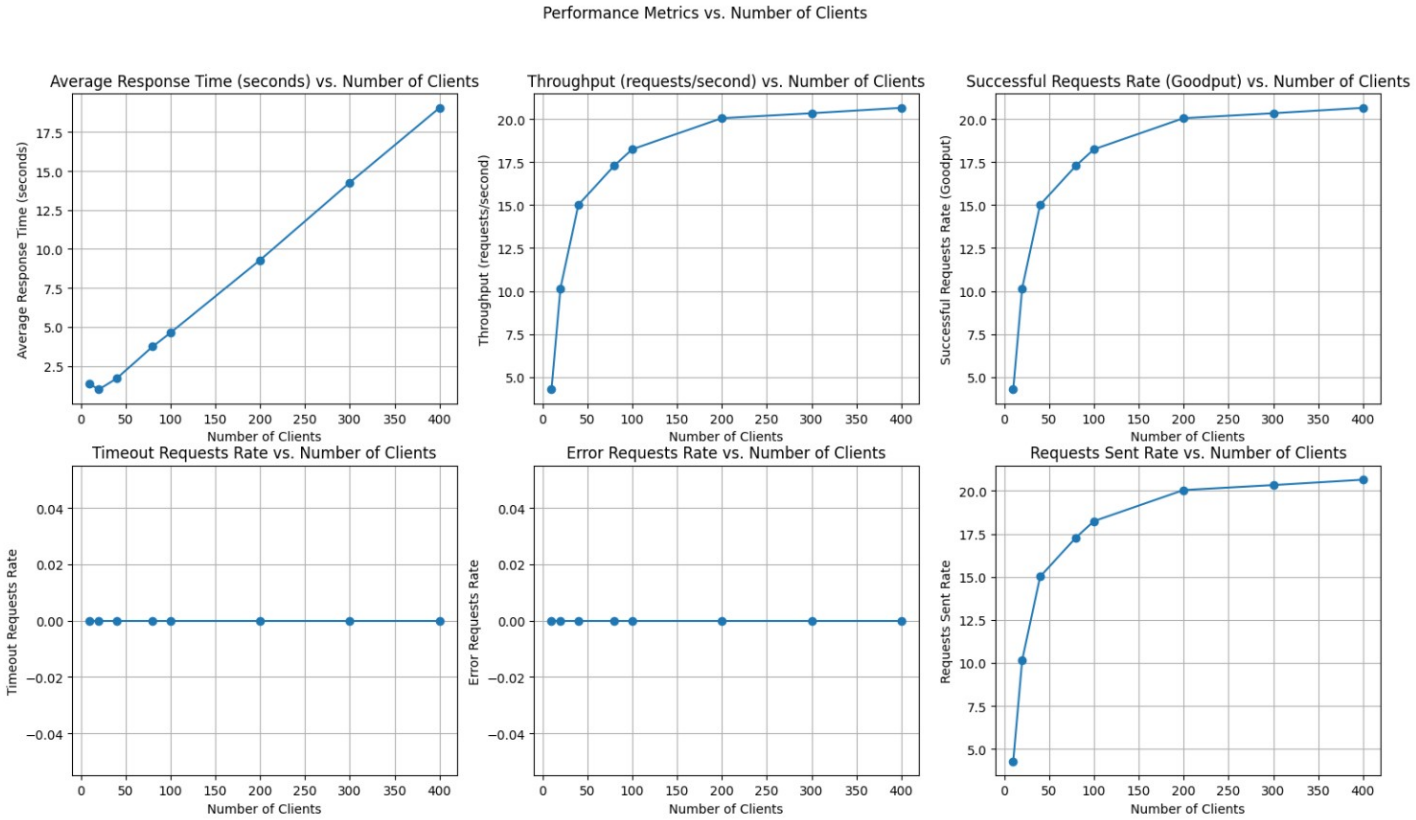
Performance Metric of V3:-

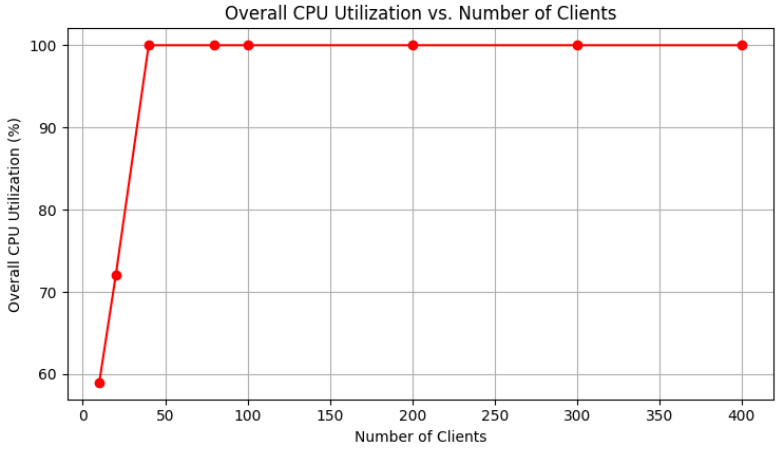
Num Clients	Avg Response Tim	Throughput	Successful Requests Rate	Timeout Requests Rate	Error Requests Rate	Requests Sent Rate	Average Active Thread	Overall CPU Utilizatio	Average Requests in Queue
10	1.33	4.280308	4.280308	0	0	4.280308	16	59	1.07
20	0.98	10.155241	10.155241	0	0	10.155241	16	72	1.08
40	1.69	15.012177	15.012177	0	0	15.012177	16	100	7.13
80	3.73	17.285337	17.285337	0	0	17.285337	16	100	28.04
100	4.62	18.237232	18.237232	0	0	18.237232	16	100	38.75
200	9.29	20.0442716	20.0442716	0	0	20.0442716	16	100	83.02
300	14.26	20.3312998	20.3312998	0	0	20.3312998	16	100	133.36
400	19.05	20.6453678	20.6453678	0	0	20.6453678	16	100	189.32

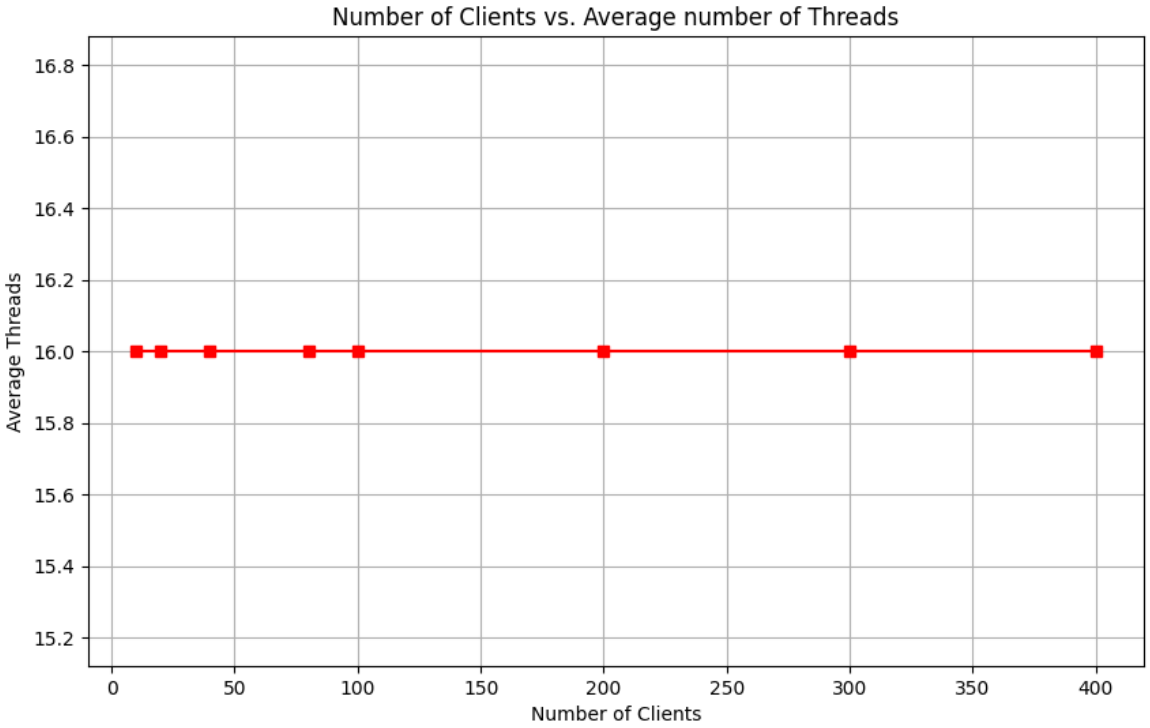
Figures:-



Observations:-

- Throughput decreases after some point of time with Average Response Time increases.

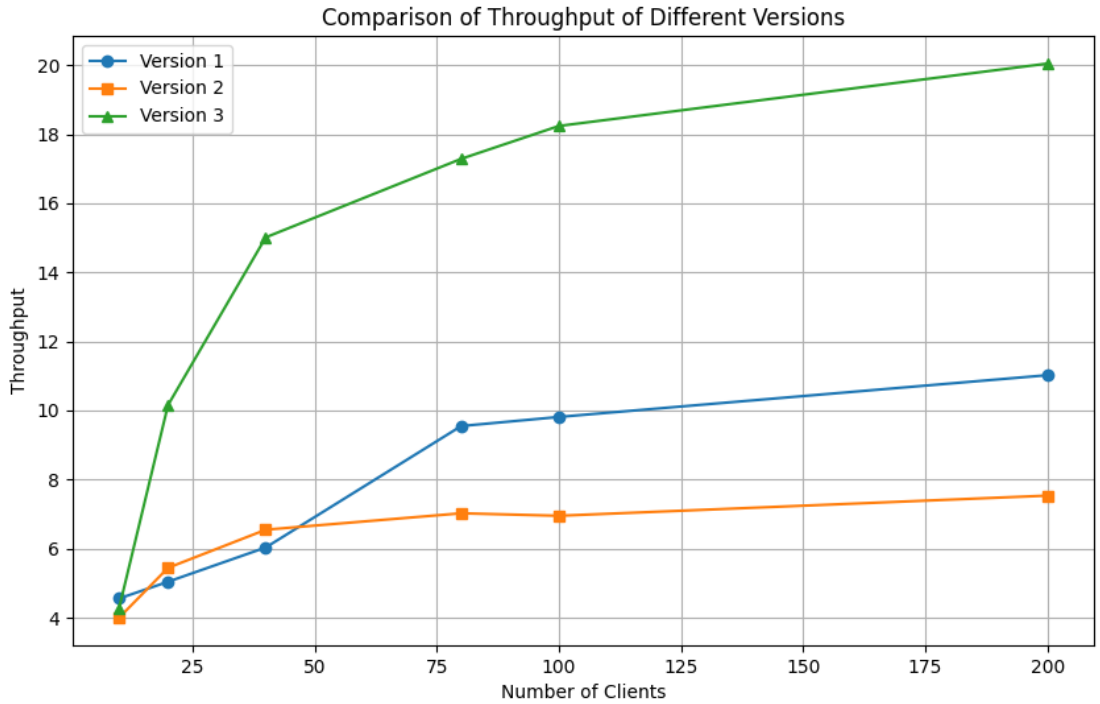




Observations:-

- CPU utilization becomes 100% after certain point of time.
- Average number of Threads are fixed (in our case 16) as thread pool size is fixed.

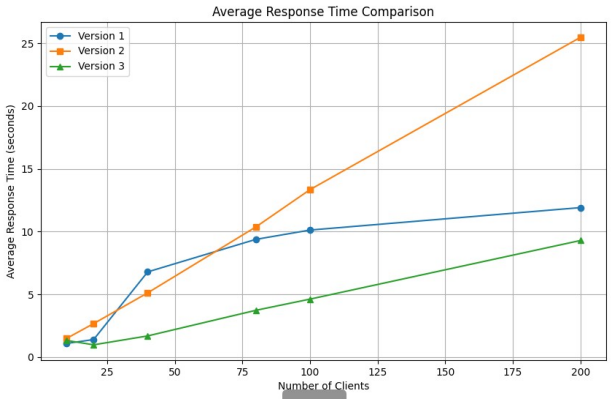
<u>Throughput comparsion between V1, V2 & V3:-</u>



Observations:-

- Throughput is more for Version 3 than others but for all it is saturating.

Average Response Time comparsion between V1, V2 & V3:-



Observations:

Average Response Time less in V3 as compare to other Versions.

Average number of requests in a queue:-