

Evaluation Images:

1. Throughput for the Scenario 1 – 1 Client

```
naveenaganesan@Naveenas-MacBook-Air CSCI-5673-Distributed-Systems-Assignment-1 % python3 buyer_evaluation.py
Number of buyer instances: 1
Active connections: 1
Throughput: 6687.187009239256 operations/second
```

2. Throughput for the Scenario 2 – 10 Client

```
naveenaganesan@Naveenas-MacBook-Air CSCI-5673-Distributed-Systems-Assignment-1 % python3 buyer_evaluation.py
Number of buyer instances: 10
Active connections: 1
Active connections: 2
Active connections: 3
Active connections: 4
Active connections: 5
Active connections: 6
Active connections: 7
Active connections: 8
Active connections: 9
Active connections: 10
Throughput: 1940.8333965732013 operations/second
Throughput: 1920.1295009215405 operations/second
Throughput: 1809.2434683884148 operations/second
Throughput: 1719.0355245690735 operations/second
Throughput: 1678.5474453431088 operations/second
Throughput: 1649.984048163139 operations/second
Throughput: 1598.4932415771723 operations/second
Throughput: 1548.4953290074104 operations/second
Throughput: 1514.492614946316 operations/second
Throughput: 1460.0126845508157 operations/second
```

3. Throughput for the Scenario 3 – 100 Client

```
Active connections: 83
Active connections: 84
Active connections: 85
Active connections: 86
Active connections: 87
Active connections: 88
Active connections: 89
Active connections: 90
Active connections: 91
Active connections: 92
Active connections: 93
Active connections: 94
Active connections: 95
Active connections: 96
Active connections: 97
Active connections: 98
Active connections: 99
Active connections: 100
Throughput: 206.98698731499596 operations/second
Throughput: 206.23434577682684 operations/second
Throughput: 201.629436187082 operations/second
Throughput: 201.40360551629175 operations/second
Throughput: 200.60623267182396 operations/second
Throughput: 200.0832427164412 operations/second
Throughput: 199.74322902149245 operations/second
Throughput: 197.04830443626284 operations/second
Throughput: 192.808054508228 operations/second
Throughput: 191.4347859901436 operations/second
Throughput: 191.258976527649 operations/second
Throughput: 190.60659355581004 operations/second
Throughput: 189.01077963819182 operations/second
```

4. Response time for the Scenario 1 – 1 Client

```
naveenaganesan@Naveenas-MacBook-Air CSCI-5673-Distributed-Systems-Assignment-1 % python3 buyer_evaluation.py
Number of buyer instances: 1
Active connections: 1
Response time: 0.004058837890625
```

5. Response time for the Scenario 2 – 10 Client

```
naveenaganesan@Naveenas-MacBook-Air CSCI-5673-Distributed-Systems-Assignment-1 % python3 buyer_evaluation.py
Number of buyer instances: 10
Active connections: 1
Active connections: 2
Active connections: 3
Active connections: 4
Active connections: 5
Active connections: 6
Active connections: 7
Active connections: 8
Active connections: 9
Active connections: 10
Response time: 0.004163408279418945
Response time: 0.00435941219329834
Response time: 0.004409909248352051
Response time: 0.004525017738342285
Response time: 0.0044961214065551754
Response time: 0.004534101486206055
Response time: 0.004677820205688477
Response time: 0.004699802398681641
Response time: 0.004797983169555664
Response time: 0.005067682266235352
```

6. Response time for the Scenario 3 – 100 Client

```
Active connections: 82
Active connections: 83
Active connections: 84
Active connections: 85
Active connections: 86
Active connections: 87
Active connections: 88
Active connections: 89
Active connections: 90
Active connections: 91
Active connections: 92
Active connections: 93
Active connections: 94
Active connections: 95
Active connections: 96
Active connections: 97
Active connections: 98
Active connections: 99
Active connections: 100
Response time: 0.007015037536621094
Response time: 0.008171272277832032
Response time: 0.008289813995361328
Response time: 0.008153581619262695
Response time: 0.008543682098388673
Response time: 0.008910298347473145
Response time: 0.00914297103881836
Response time: 0.009716129302978516
Response time: 0.009036827087402343
Response time: 0.009749031066894532
Response time: 0.010262513160705566
Response time: 0.010171818733215331
Response time: 0.00965256690979004
Response time: 0.010335278511047364
Response time: 0.011185383796691895
Response time: 0.011386728286743164
Response time: 0.011488723754882812
Response time: 0.011682939529418946
Response time: 0.01180570125579834
Response time: 0.011860084533691407
Response time: 0.012822318077087402
Response time: 0.01306309700012207
Response time: 0.014350366592407227
Response time: 0.013790512084960937
Response time: 0.014067697525024413
Response time: 0.016600489616394043
Response time: 0.01587820053100586
Response time: 0.01648259162902832
Response time: 0.016919994354248048
Response time: 0.016715025901794432
Response time: 0.016592764854431154
Response time: 0.016987061500549315
Response time: 0.017452001571655273
Response time: 0.01700568199157715
Response time: 0.018226565580006786
```