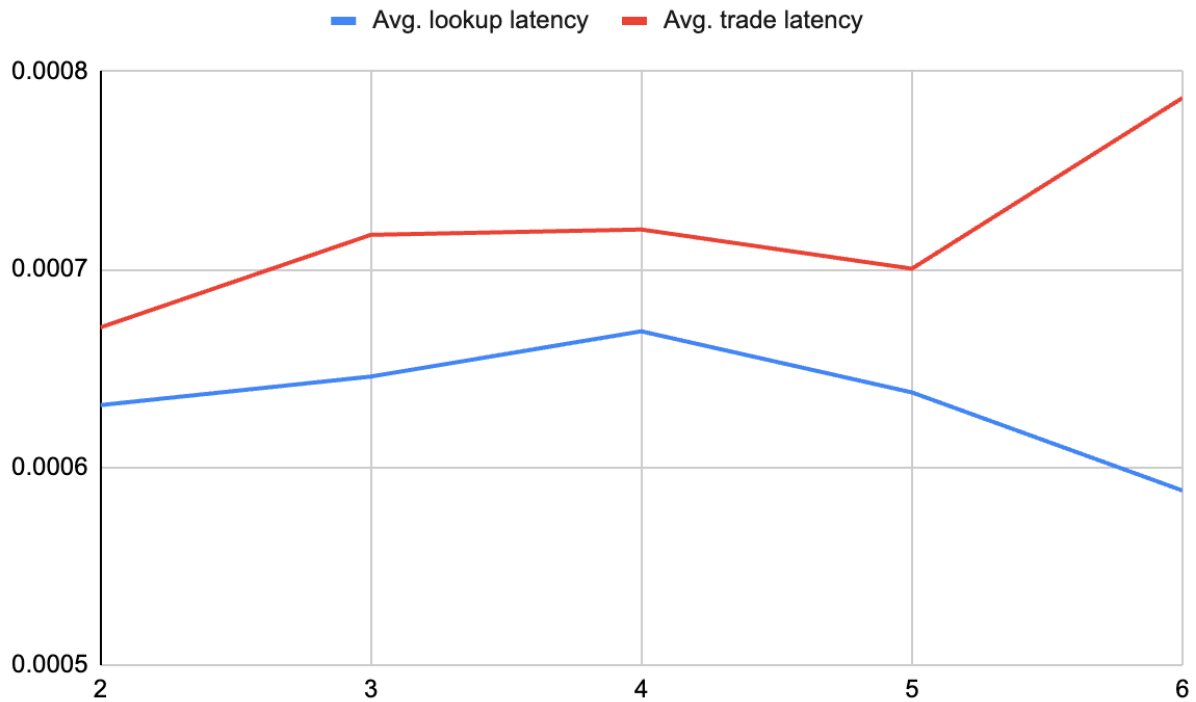


### Part 3: Testing and Performance Evaluation

We have the maximum available threads to 2, and then compare with lookup and trade latency when concurrently running 2 to 6 clients at a time.

Number of clients	Avg. lookup latency	Avg. trade latency
2	0.06313991547	0.06706789562
3	0.06458484529	0.07175017704
4	0.06687169844	0.07201856999
5	0.06378428956	0.07003805041
6	0.05882328252	0.07866902025

Below plots show the average lookup latency when varying the number of clients:



1. Does the latency of the application change with and without Docker containers? Did virtualization add any overheads?

Yes, we observe more latency with using Docker containers

2. How does the latency of the lookup requests compare to trade? Since trade requests involve all these microservices, while lookup requests only involve two microservices, does it impact the observed latency?

From the tables and the graphs, it is pretty clear that trade requests have more latency over varying client values when compared to the lookup latency.

3. How does the latency change as the number of clients changes? Does it change for different types of requests?

There is a partial increase in the latency values as the number of clients increases. The variations are different in the case of lookup and trade with observable difference in trade latency values as the number of clients go up.