Part 2:

1. We ran the monolithic implementation of the HotelMap app to get some baseline metrics so we could evaluate and compare with the microservices implementation of the app. We also modified the supplied LUA script such that it would only make requests for the search functionality of the app and ignore any other unimplemented functionalities. Furthermore, we used a newer version of the wrk which allowed us to get more accurate results for the 99.999th latency percentile and keep the throughput constant. We chose a fixed number of threads for the workload generator @ 10 threads since it was a good balance between the available cores of the machine we were using and the handling of the connections. Each test was left to run for 30 seconds. 10 tests were made, each with increasing number of connections (100-1000, increments of 100).

As we can see, the monolithic implementation of the app was able to