

Experiment #1

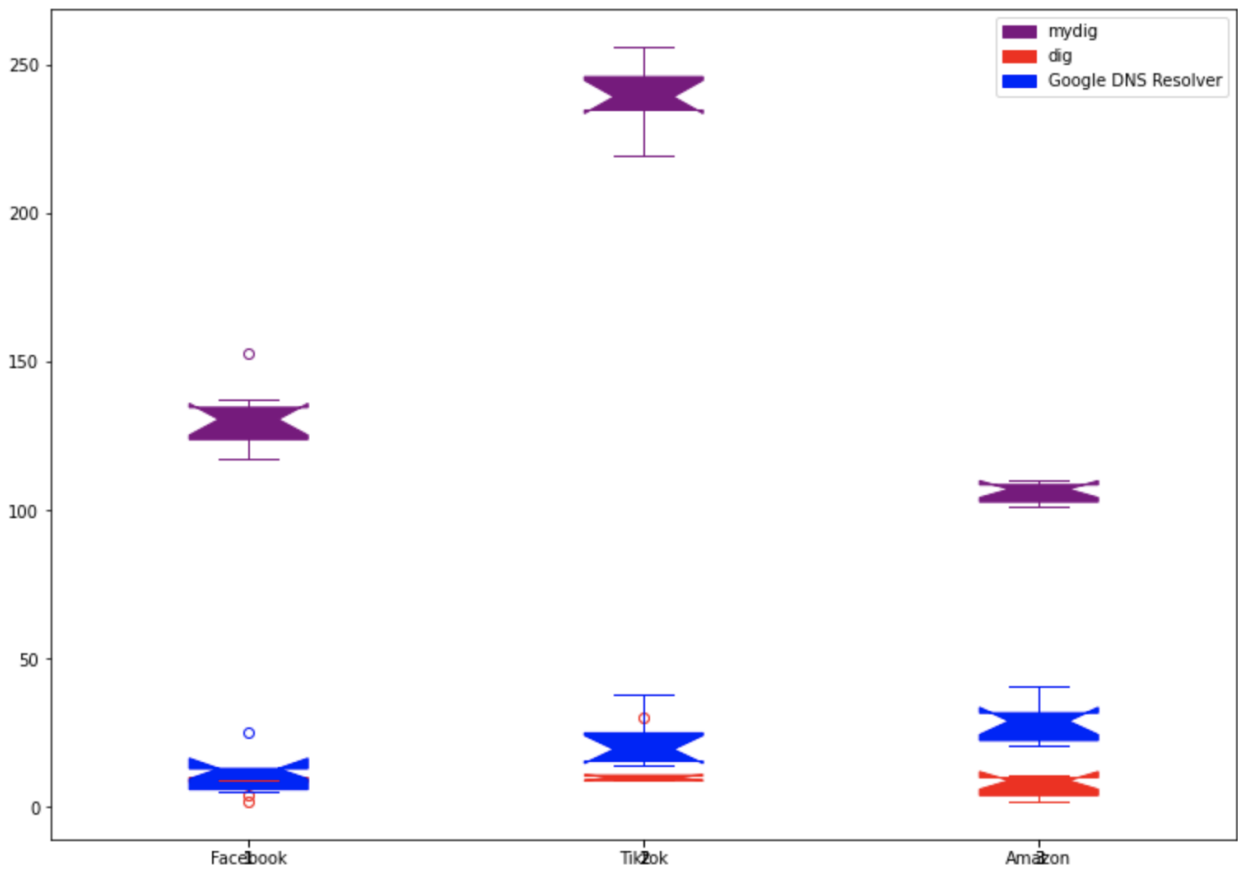
	25th percentile	50th percentile	75th percentile
Facebook	123ms	127.6ms	135ms
Tiktok	234ms	239.1ms	248ms
Amazon	102ms	105.5ms	109ms

Experiment #2

	25th percentile	50th percentile	75th percentile
Facebook	6.5ms	9ms	10ms
Tiktok	9ms	10ms	22ms
Amazon	3.5ms	9ns	10ns

Experiment #3

	25th percentile	50th percentile	75th percentile
Facebook	6ns	11ns	13ns
Tiktok	15ns	19.5ns	27.5ns
Amazon	22ns	29ns	36ns



Discussion

Overall, the local DNS resolver had the best performance, slightly ahead of google DNS resolver. However, the mydig resolver had the worst performance of the three by far.

The reason why local DNS resolver has the best performance is because it is the closest to the client, so the query has less traveling time compared to the google DNS resolver. Also local DNS resolvers use caching for frequently used DNS records like many of the popular domains like Amazon, etc.

The reason why mydig resolver had the worst performance is due to a number of reasons. One of them might be due to implementation, as it may not be optimized for performance. It does not use caching like the local dns resolver. Also, there could be greater network latency, which ultimately increases query time.