





Based on the results of the three experiments, it is clear that the Local DNS experiment proved to be the fastest out of the three with Google DNS coming close after that, and MyDig having much longer query times.

The Local DNS must run quicker than the Google DNS because the Local DNS server is much closer to the computer than the Google one is. A reason why the Google DNS server could be running about as fast as Local DNS even though it is farther away could be due to efficient caching, which results in more consistent and quicker query times.

Lastly, a possible reason as to why MyDig was much slower than the other two experiments could be due to not using cache at all and the fact that it was written in python, which is not as effective as it could be. Because of not using caching, the program would have to keep starting at the root server each iteration, which slows down the performance significantly.

Made with google sheets, link attached:

https://docs.google.com/spreadsheets/d/1YtJo9KYB7u-X7SjLgklYR1GEUIKTisjEzBjPYCO6JzA/edit?usp=sharing