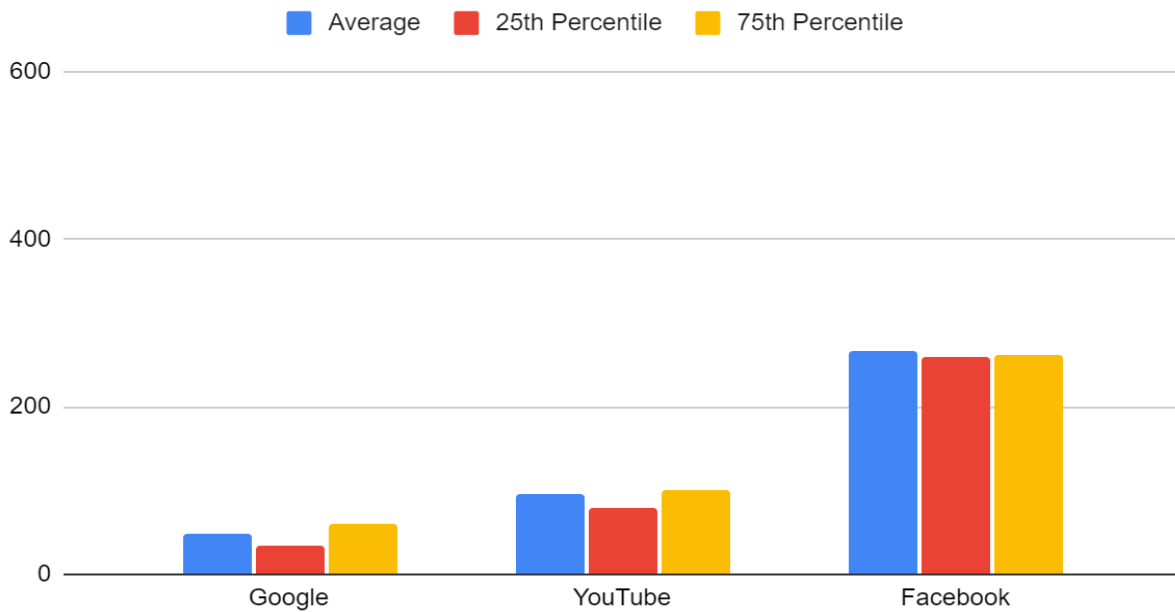Name: Jeffrey Chin
Netid: jefchin
SBUID: 113257669

Here is the link to my data, results, and graphs:
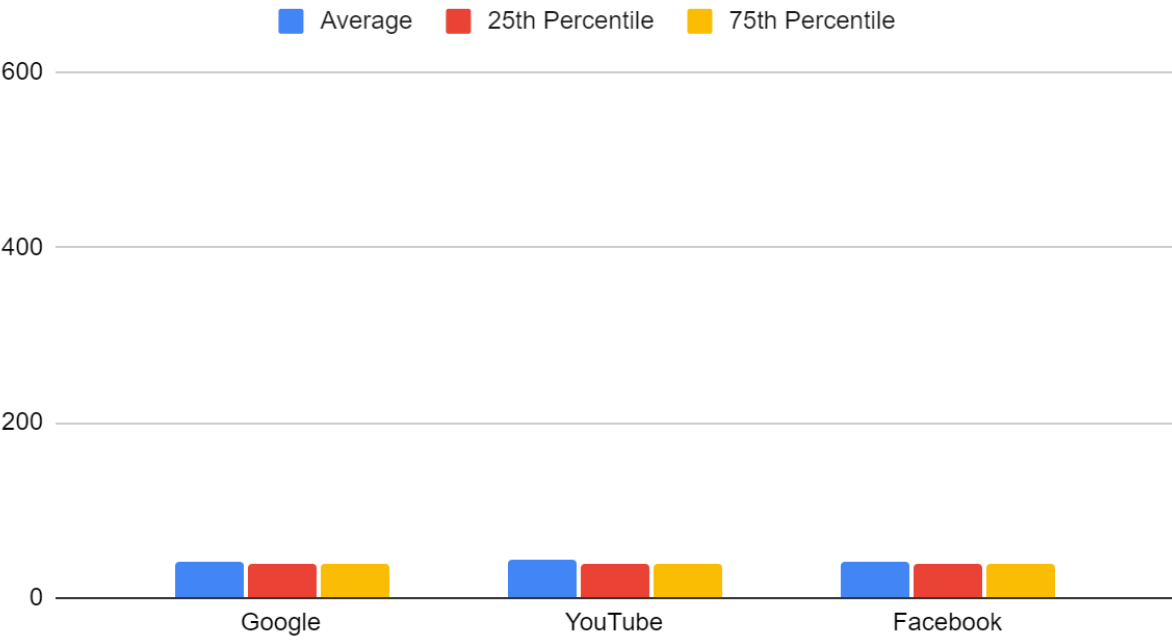https://docs.google.com/spreadsheets/d/1YydWSBqcKOgkR3x8euoxM4mlOo55GtGO8yCCjCF8SB4/edit?usp=sharing
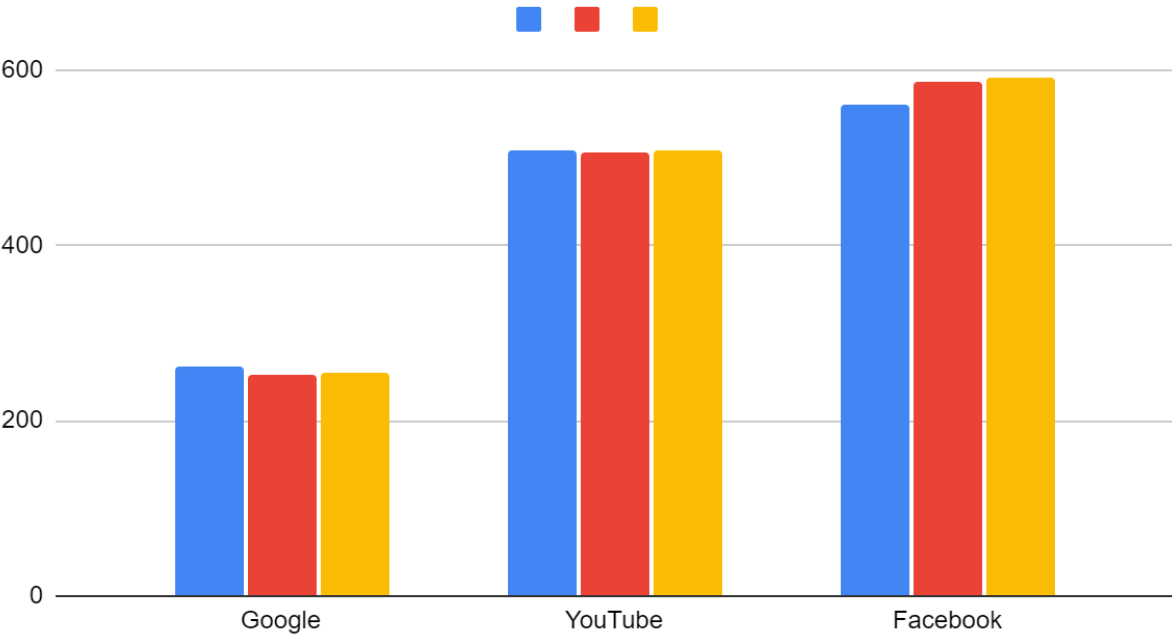(Explanation is below of this PDF).

Local DNS

Legend: ■ Average ■ 25th Percentile ■ 75th Percentile

Categories: Google, YouTube, Facebook

Google DNS

Legend: ■ Average ■ 25th Percentile ■ 75th Percentile

Categories: Google, YouTube, Facebook

Explanation:

Based on the charts shown above, the DNS resolver I created is slightly slower than the local DNS but significantly faster than Google's DNS. There are many factors that contribute to these results. One reason can be the way I implemented my own dig program, cache, and the use of a VPN. One thing that caught my eye was every time I had to reconnect to the VPN, the query time for the 3 websites were different from what I recorded. Another reason for the difference in results can be the programming language used to implement the DNS resolvers. Other reasons can be the distance from my computer to the physical servers.