

24<sup>th</sup> January 2026

8:24 p.m.

I spent the week practicing modular arithmetic to get a better grasp of the topic since it's not really something I've ever done before. I practiced the Miller-Rabin Primality Test with a couple of different numbers,

I spent this week focusing on watching videos that talk about network security and the different types of ciphers and cryptography that are used in network security, including the OSI security architecture; Caesar cipher, Monoalphabetic cipher, Playfair cipher, Hill cipher, Polyalphabetic cipher amongst a couple of other things.

I went through the pre-selected source codes that I chose from GitHub to understand each step of building the RSA algorithm. The different but similar functions and coding structures are making it easier to understand the process. I plan on testing with inputs over the next few days to see if at least the first part of my code will work (I've decided to write and test the code in smaller sections).

So far, I've spent about ten hours over the entire week to get a better understanding of cyber security as a topic overall so that it would make it easier to understand the difference in exactly how the different types of structures are implemented in network security.