7th Feb 2026

10:58 p.m.

I worked on fixing my code (with assistance from Microsoft Copilot) to finalise the code and set up RSA so that the input message (whether a text string or an integer string) will be encrypted and decrypted successfully. The algorithm (as of now) is only for small texts or numbers so that the totient factoring time isn't too large and causes the system to freeze.

The program has progressed greatly, and this is the simplest version of the algorithm possible. I was wondering, should I also attempt to include AES encryption and combine it with the RSA I've built so that the encryption works exactly like the algorithms they use in the real world? So far, the encryption is also for the ASCII characters only, and should I stick to this only?

Implementing the code and also testing it out by inputing the messages a few times helped me figure out the totient factoring time which needs to be taken into account when setting the bits in the RSA setup since the larger the mount of bits the more likely it is that it wouldn't even be possible to compute Euler's totient due to the insane amount of time it would take.

Everything so far has been clearer more or less; the challenging part was mainly figuring out how to convert a text string into an integer so that RSA encryption can be used.

Depending on your feedback on whether i should keep the algorithm as it is now, or if I should add the AES, I will decide how to proceed. Also, I still need to finish writing the Testing Document since I still haven't done that.

I worked on the lab for about 10 hours this week.