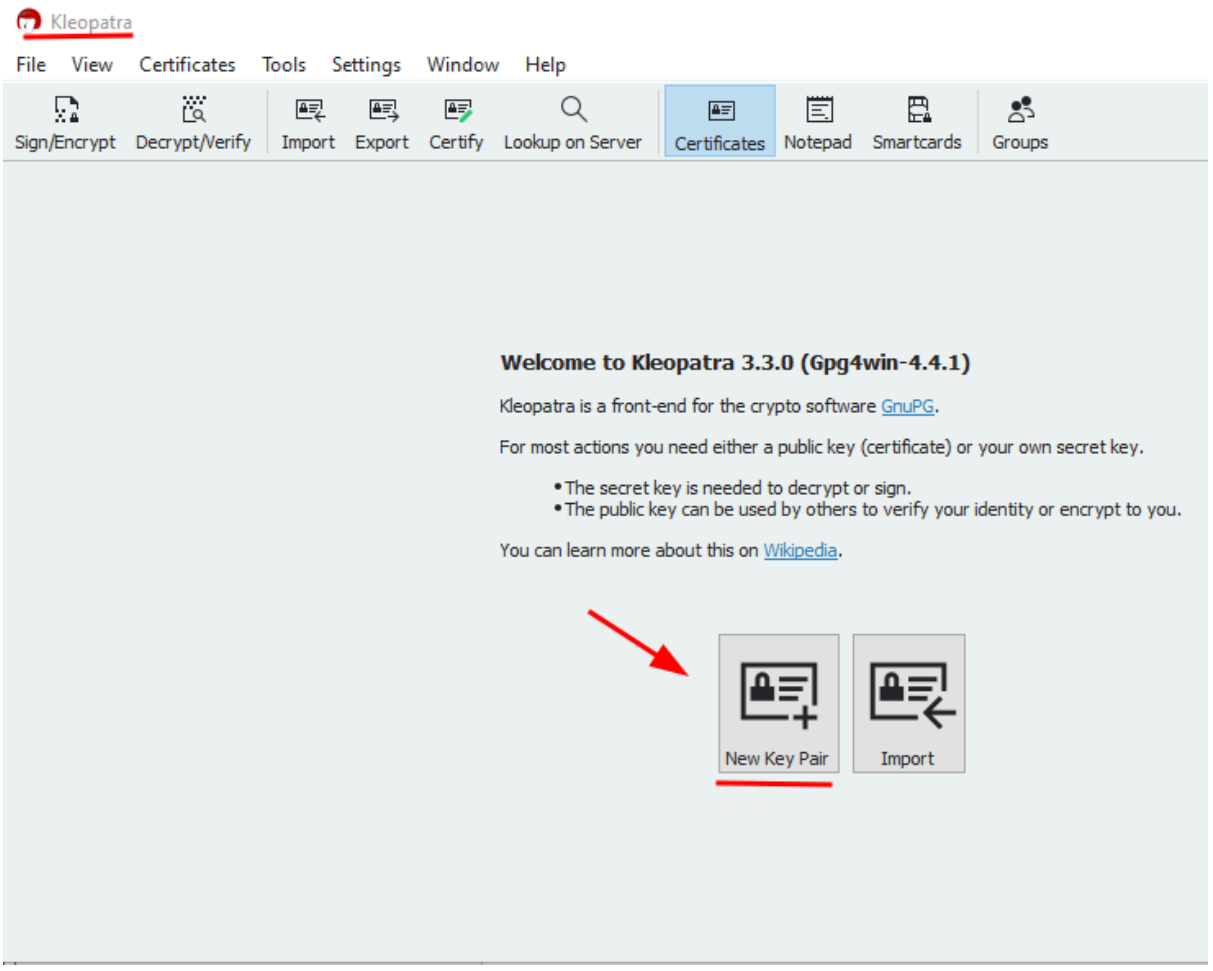
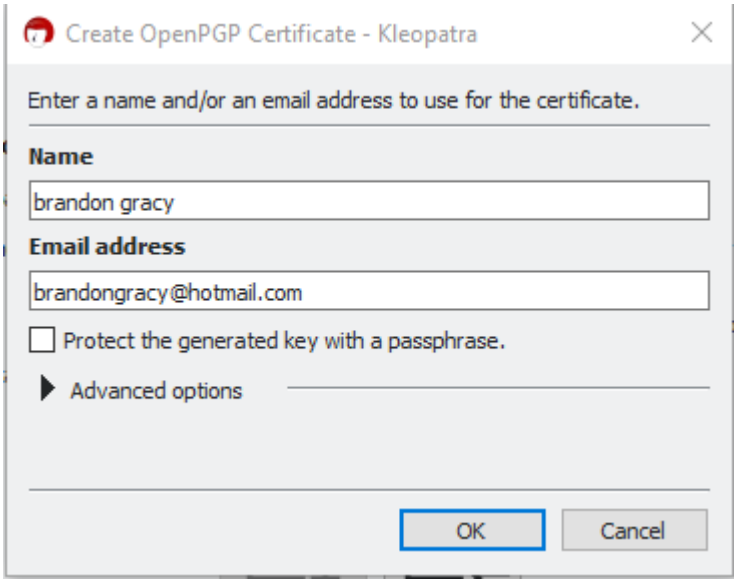
Brandon gracy *02/12/2025*

Today we are going to see how to use an asymmetric encryption solution for text, email, files, directories, and disk partitions.

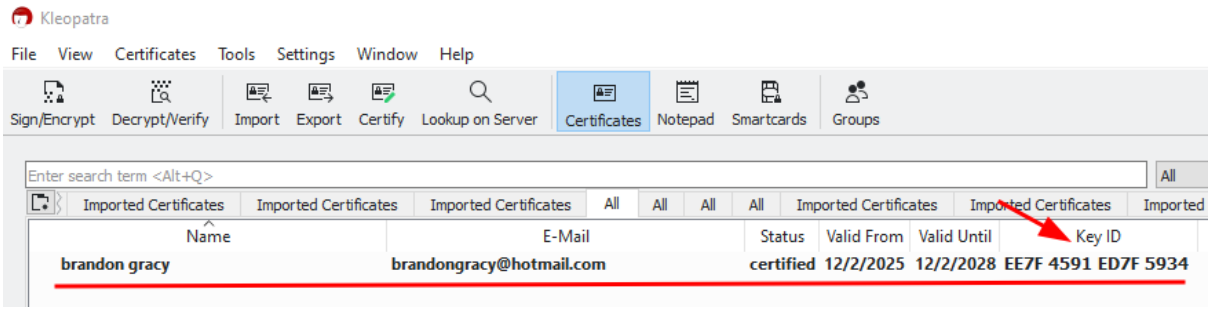
For this assignment, we didn't create virtual machines. my college Miguil was using Ubuntu OS, and i am using Windows OS. we decide to generate our own key, after verifying each other key, we encrypted the files using the other person's public key. This approach ensured two core security pillars: Confidentiality and Integrity.



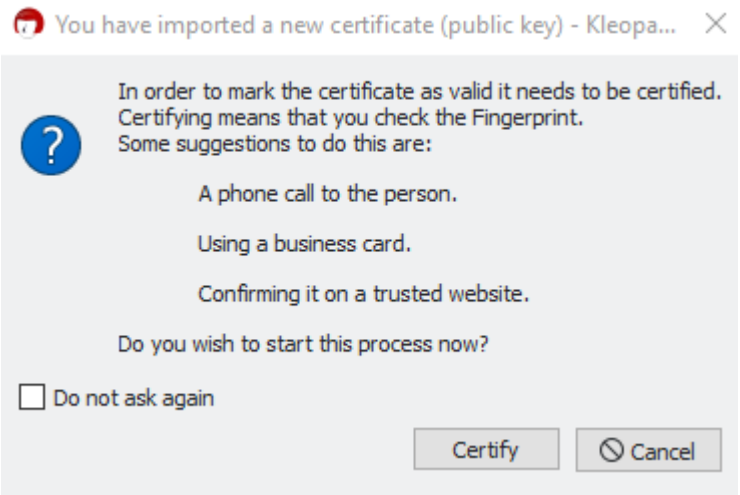
Let’s start downloading the app Kleopatra, it will be our software that will encrypt and decrypt our files.



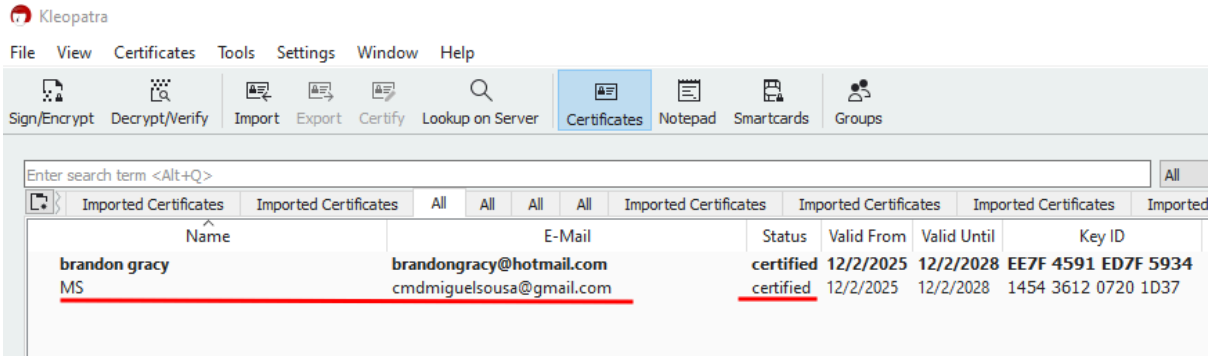
Here, we have to put our email and name, to create both the keys.



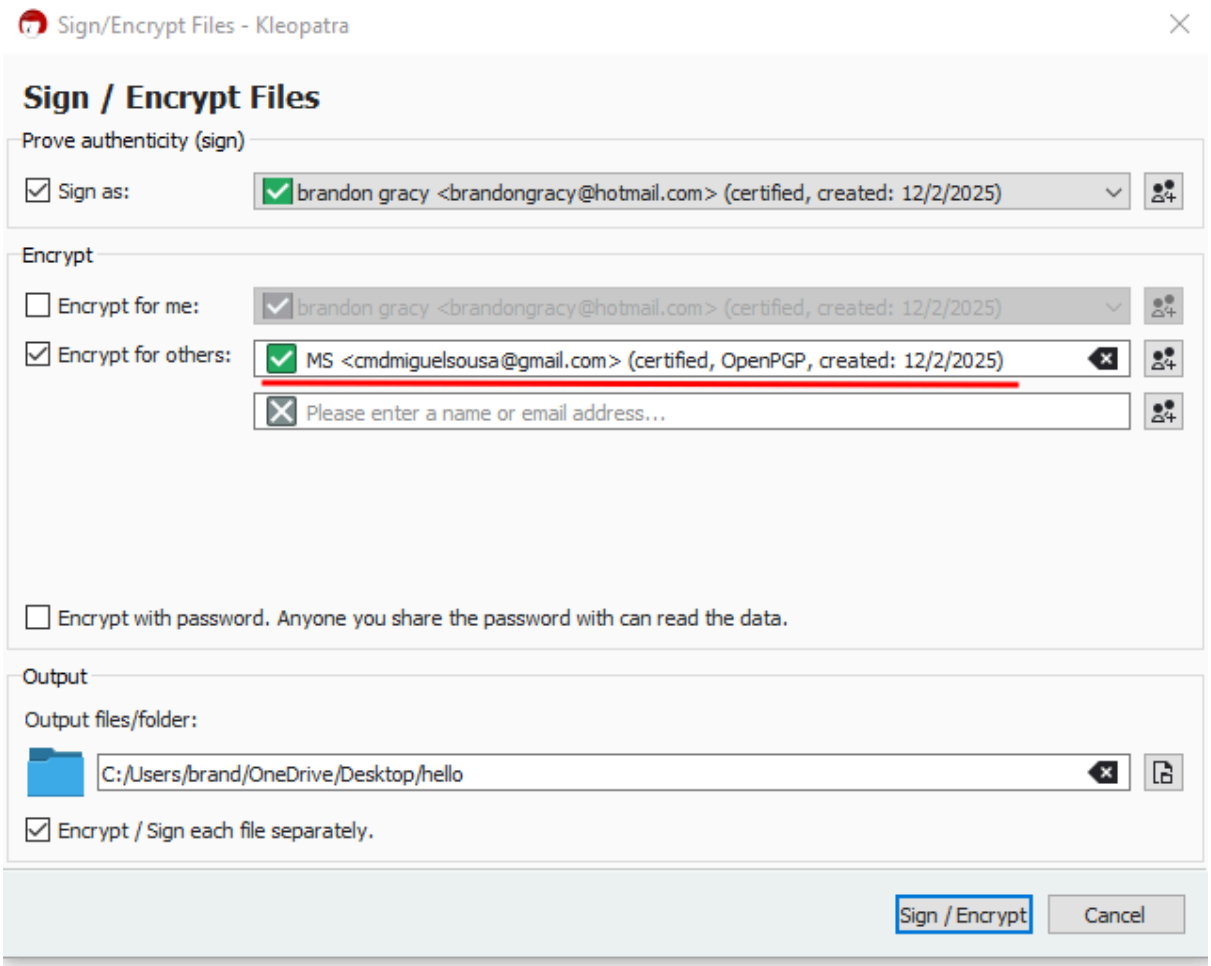
That’s the place where we have to put our college’s key, to encrypt some file with a key that belongs to him, he will send the key to me.



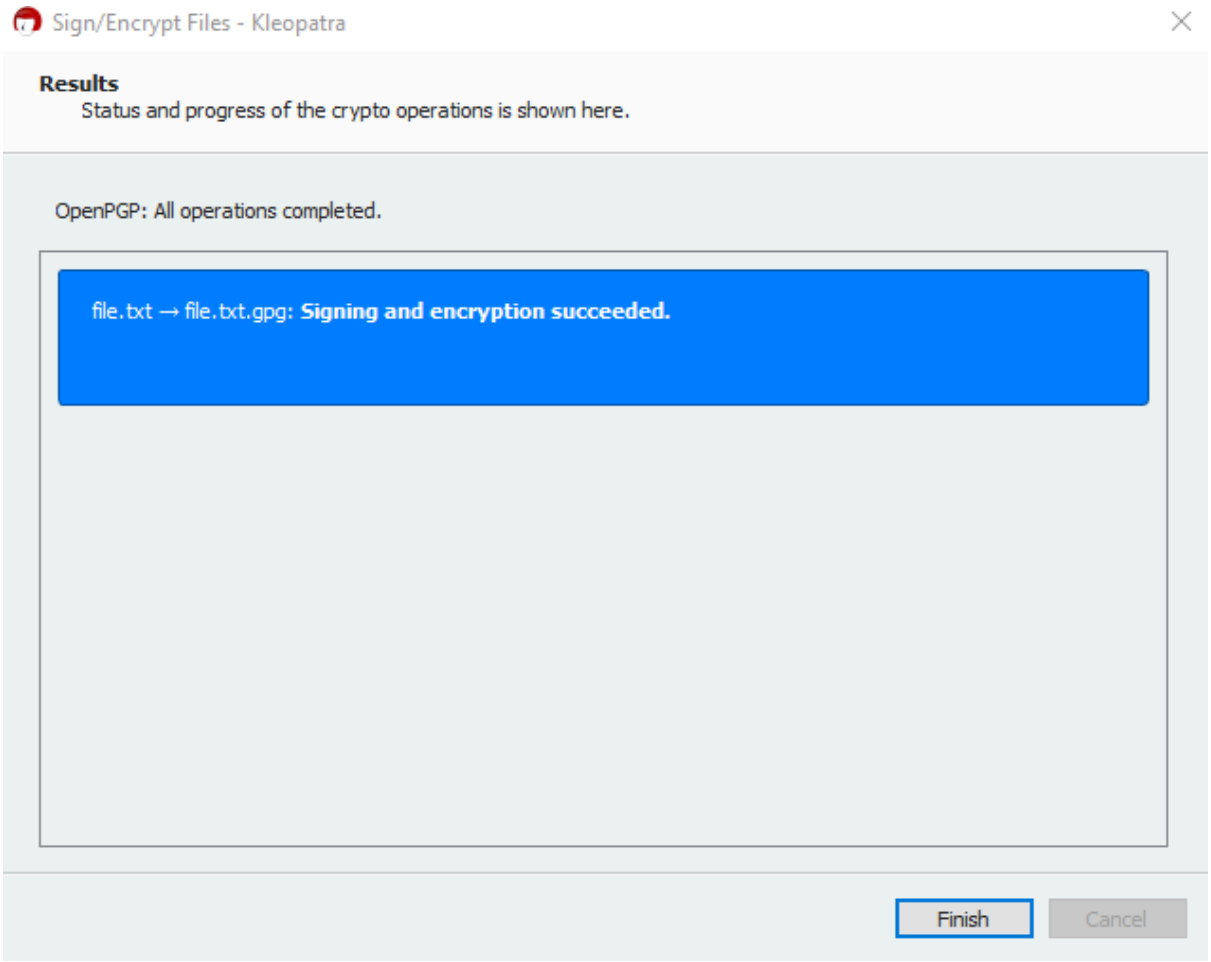
We have to certificate this key to encrypt the file to send to him.



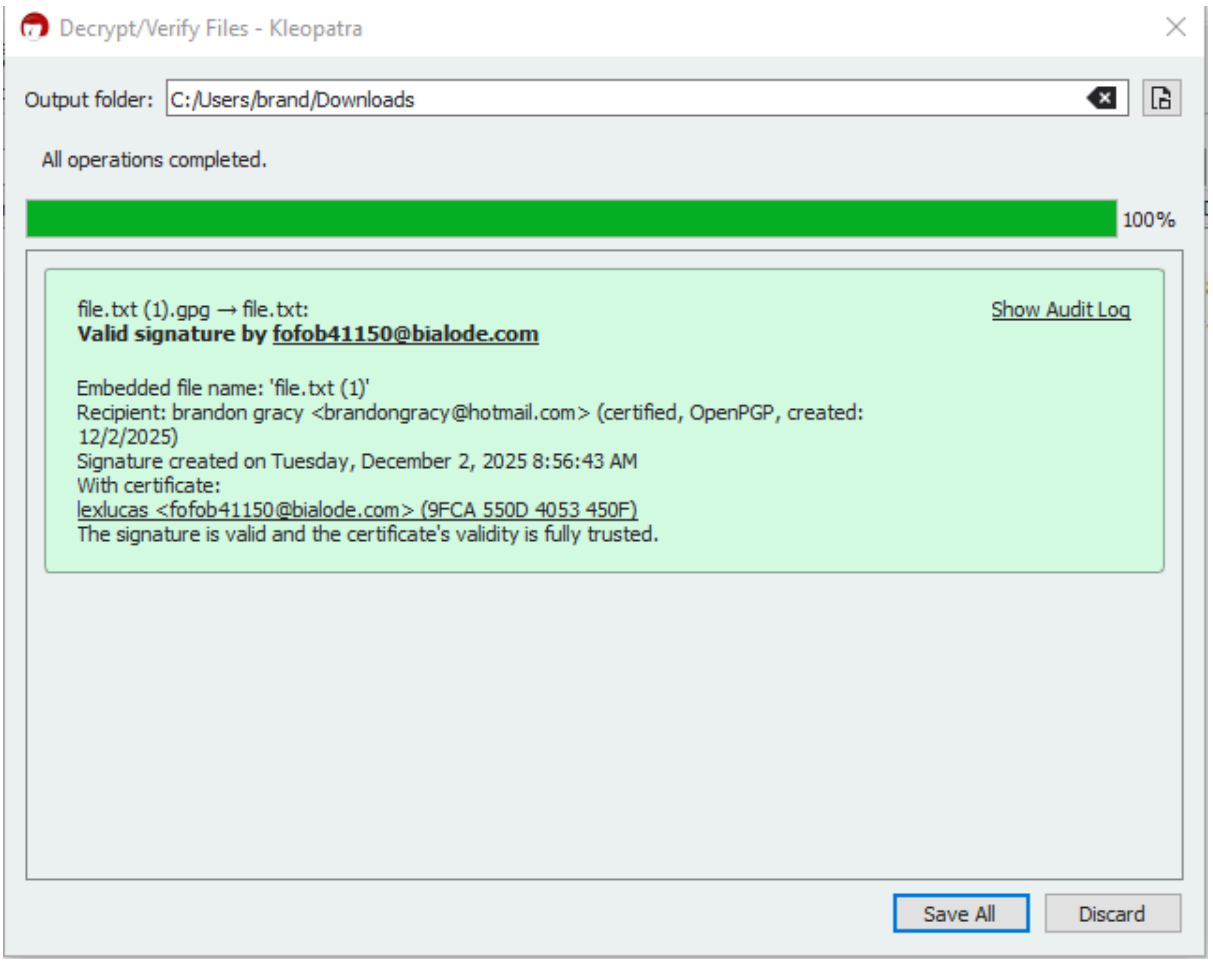
Now we can see the public key that belong to our college.



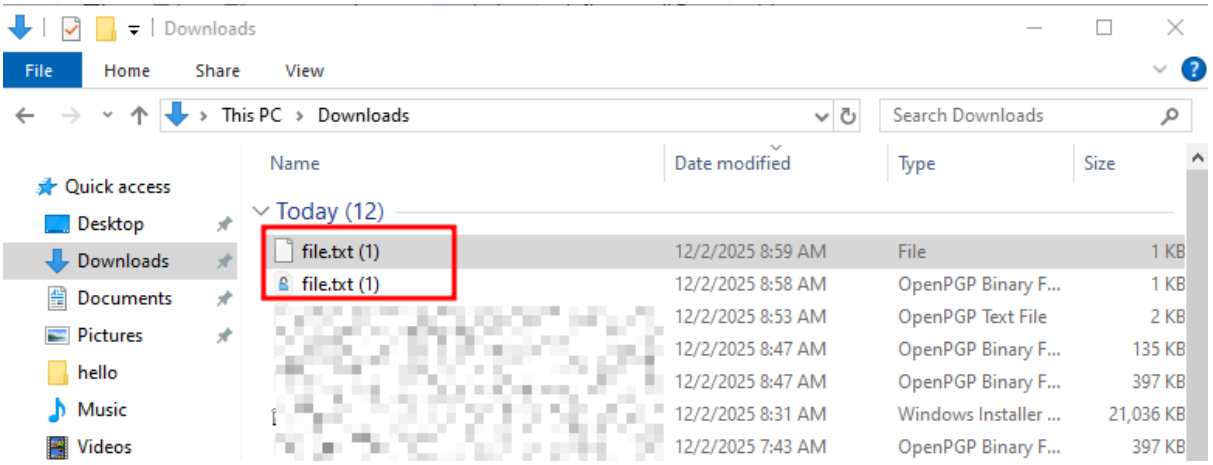
Now, let’s encrypt some file with his key and send it to him.



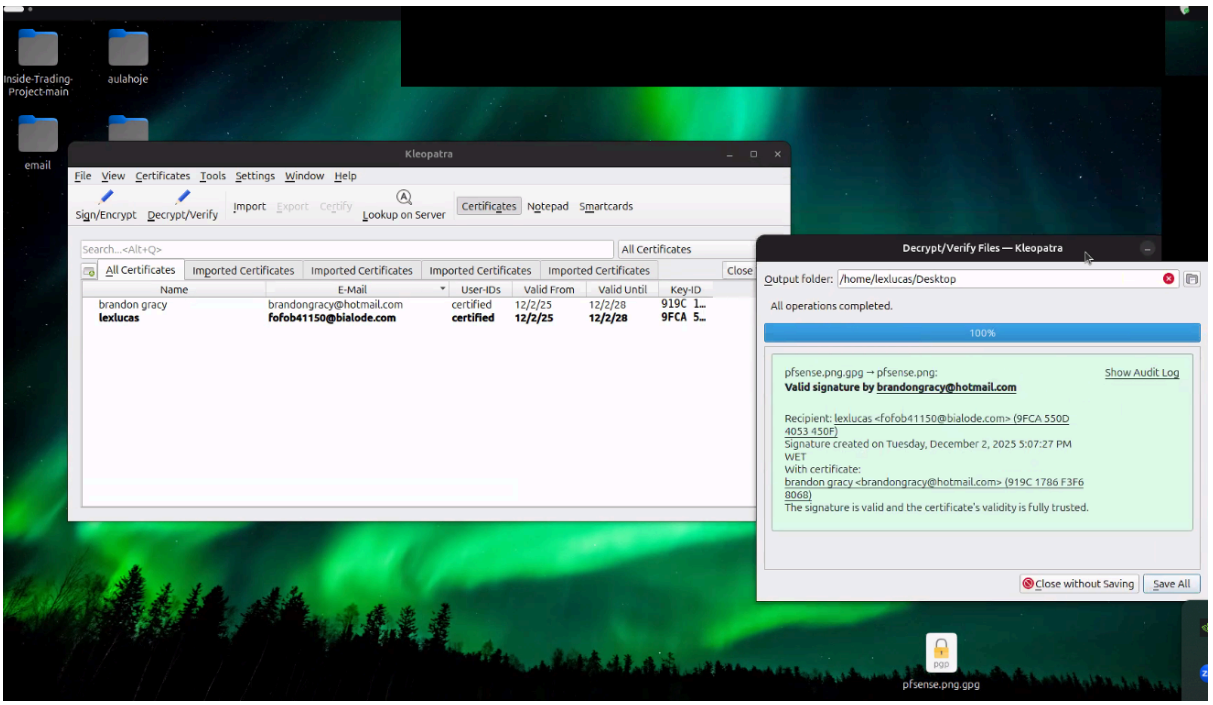
Now, it's already encrypted, we just have to send it to him, and he will be able to decrypt with his private key.



Here we can check that we decrypt one file sand by our college with the college's public key that he did sand to us before.



Now, the file can be read, because it is decrypted.



That's a picture by my college's computer showing that he got decrypt the file that i sand to him.