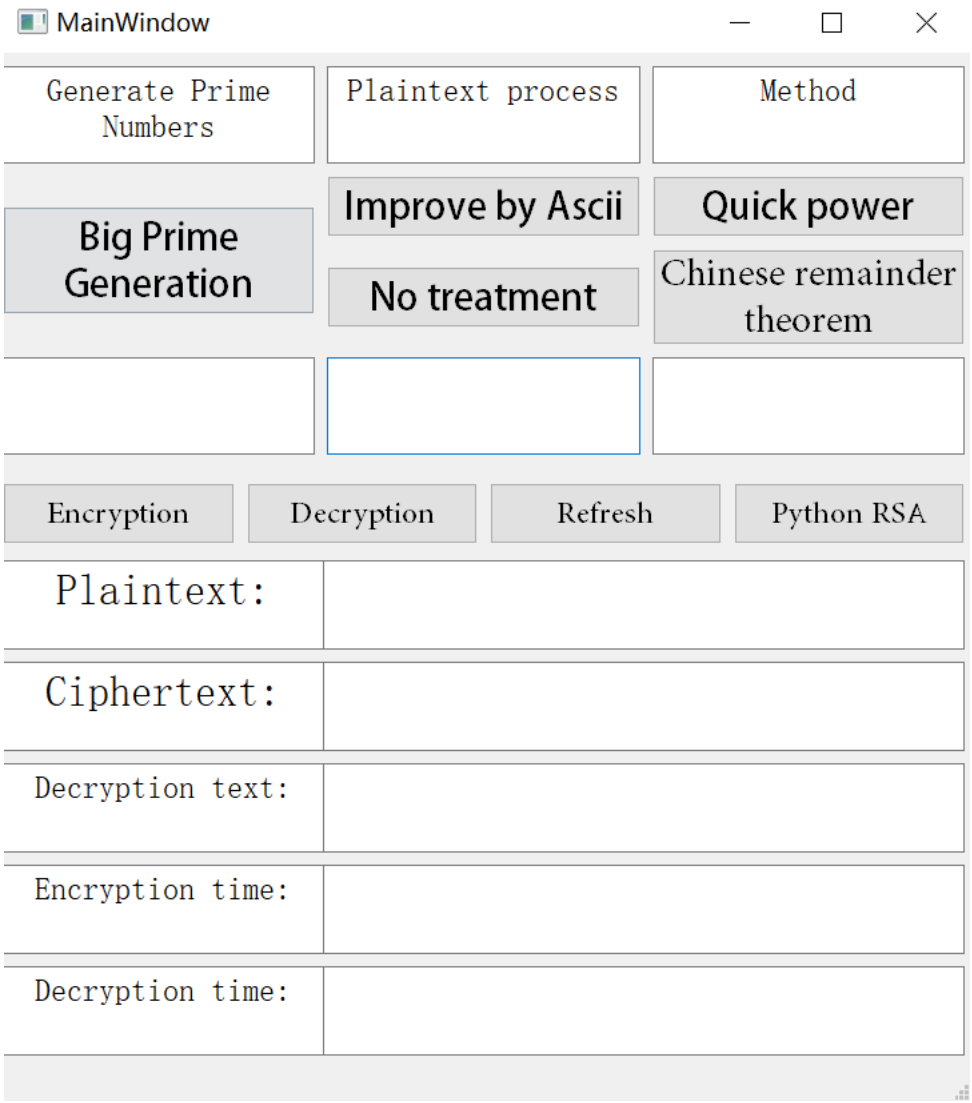
Code Guide

To run the code, we can use python interpreter to run the main.py can open the UI interface. Or we can run the exe file can also open the UI interface. The directory of the exe file is "/dist/main/main.exe".

When running the code, the UI interface is like this:



There are five functions to process RSA. "Big Prime Generation" can generate big primes. "Improve by Ascii" can transform the plaintext into Ascii format. "No treatment" means the plaintext is not going to be transformed before encryption. "Quick power" means the RSA uses this function to encrypt and decrypt. "Chinese remainder theorem" means the RSA uses this function to encrypt and decrypt.

Below is the process of using this interface:

1. Input the plaintext and select functions.

2. After choosing the functions and inputting the plaintext, click the "Encryption" button and then the Ciphertext and Encryption time will show up.
3. Next, click "Decryption" button and the Decryption text and Decryption time will show up.
4. Click "Refresh" button to initialize the information.
5. If you click "Python RSA" button, the system will use the python's RSA function.
6. Note: This RSA does not support Chinese plaintext.