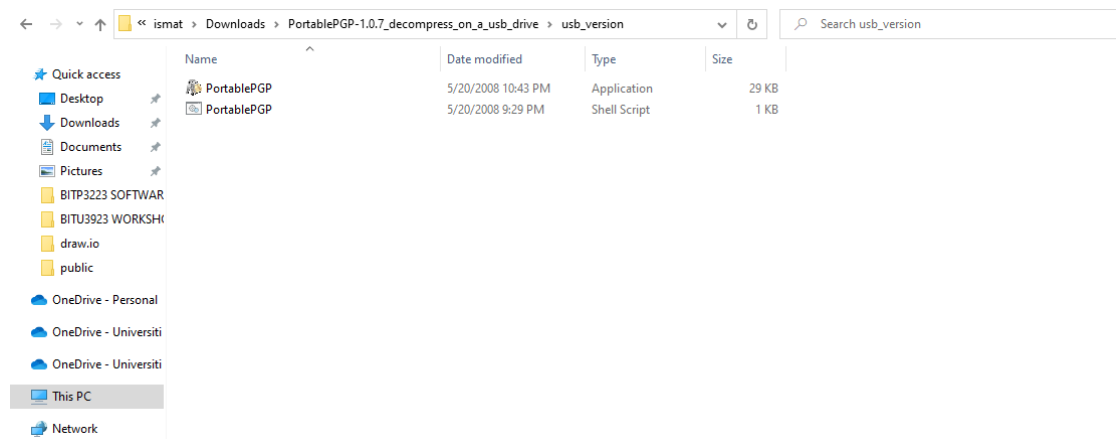
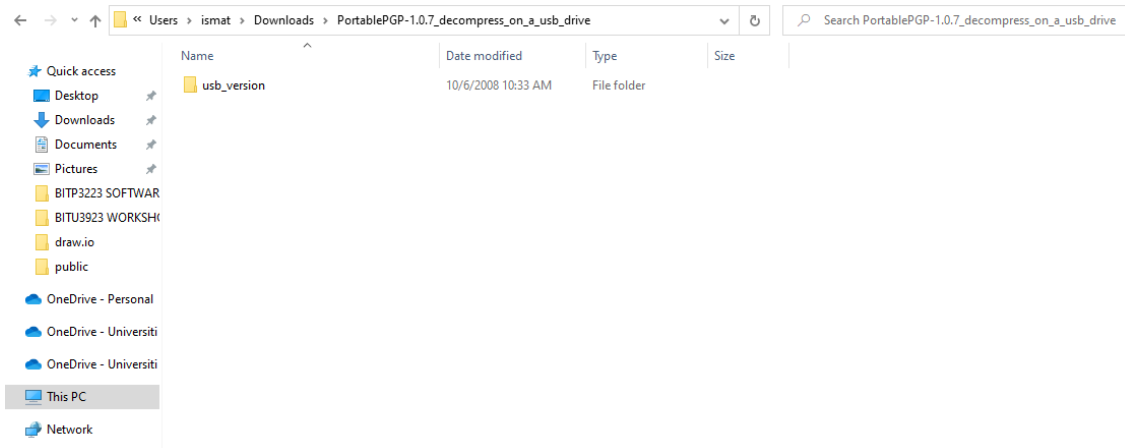
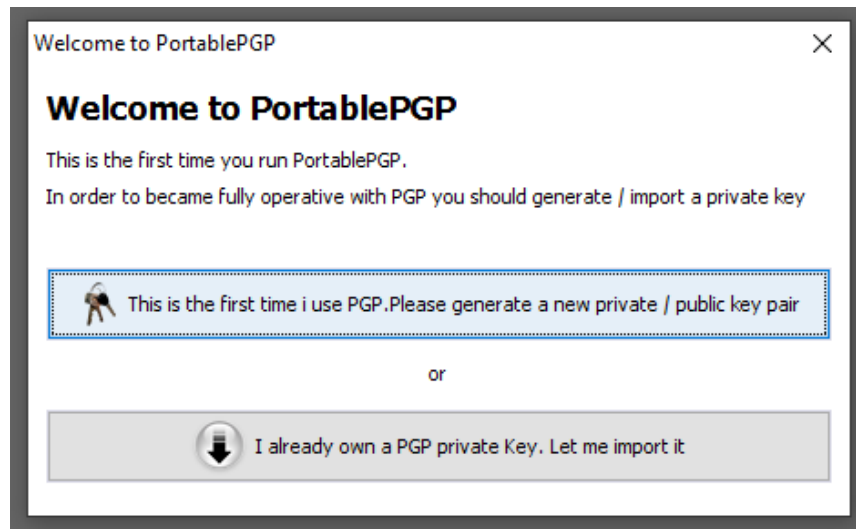


## Lab 6 : PGP Security

1. Download PortablePGP from <http://pggp.sourceforge.net/> and choose the “Runs everywhere USB-Stick”.
2. When the download is completed, you will see the application is at Downloads folder.




3. Run the PortablePGP application and this window will pop-up. To get started choose **“This is the first time I use PGP...”** as this is the first time you are using PGP.

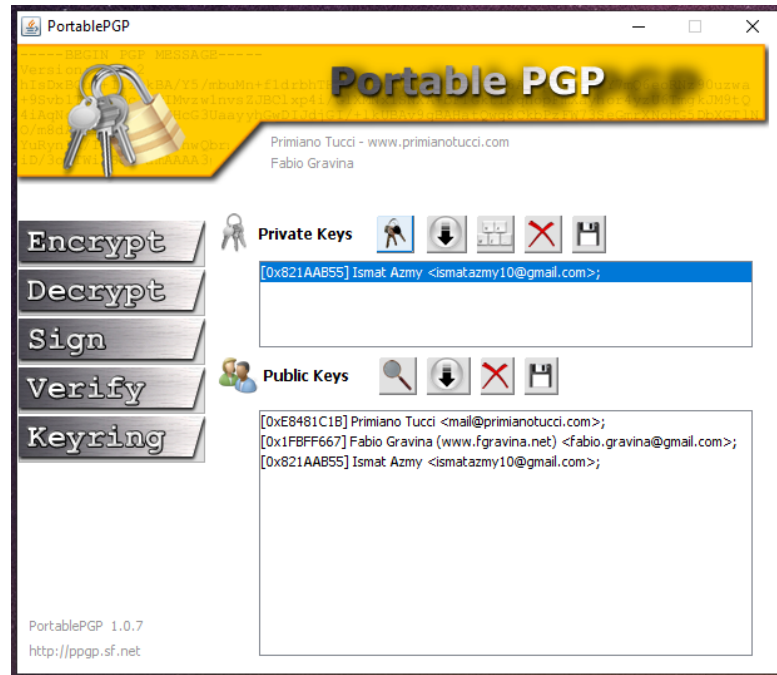


4. Then you are required to create your own key pair which contains your private and public key as shown in the picture below. Enter your name, your email address and the passphrase. Then, click **Generate** button.

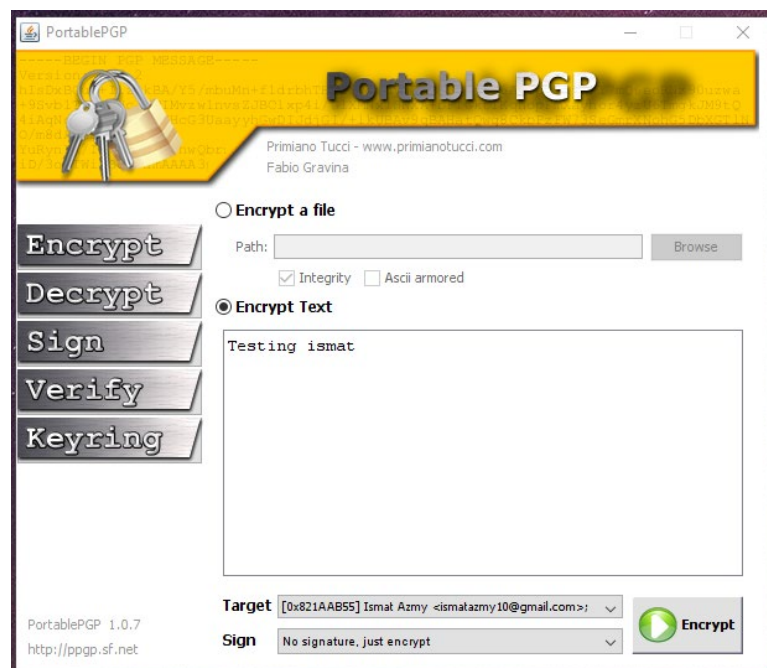
A screenshot of the 'Generate a new Key Pair' window. The window has a title bar with 'Generate a new Key Pair' and a close button. The main text says 'Generate a new ElGamal key pair'. There are several input fields: 'Name:' with 'Ismat Azmy', 'E-mail:' with 'ismatazmy10@gmail.com', and 'Comment:' which is empty. Below these is the text 'Resulting key Ismat Azmy <ismatazmy10@gmail.com>'. There is a 'Key size' field with '1024' and 'bits'. Below that is a checkbox for 'Paranoid ElGamal (p,g) parameter generation (very slow)'. There are two 'Passphrase:' fields, both with masked characters. At the bottom is a green 'Generate' button with a play icon.

5. Once you click Generate button, PGP will create your key pair and you will see your private and public key in PGP windows as depicted in the picture below. Save your

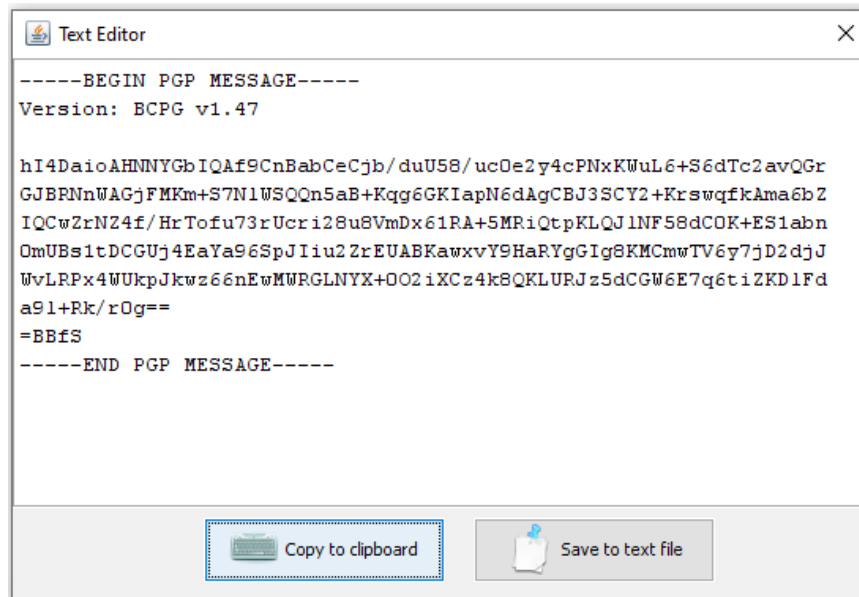
public key by clicking .



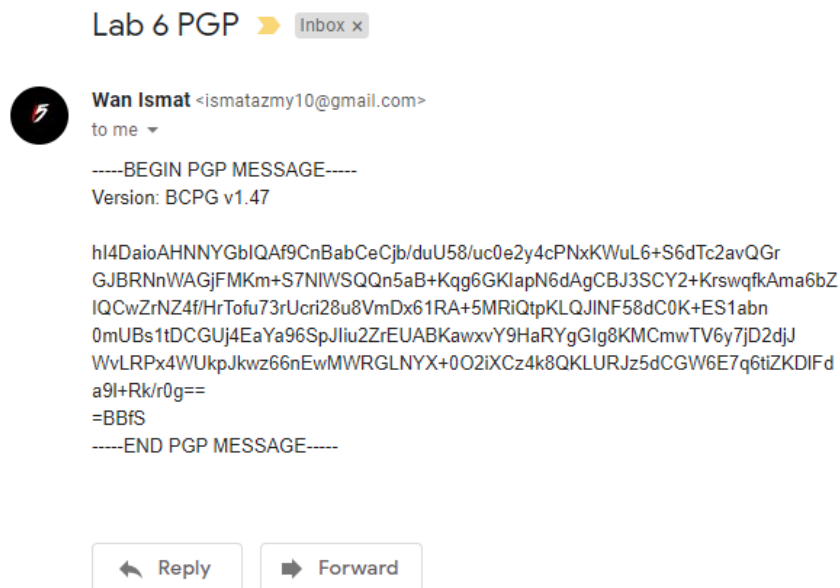
6. Go to Encrypt button, then select your email contact, choose Encrypt Text and paste the text pane as shown in picture below. Please put the Target is your friend's public key.



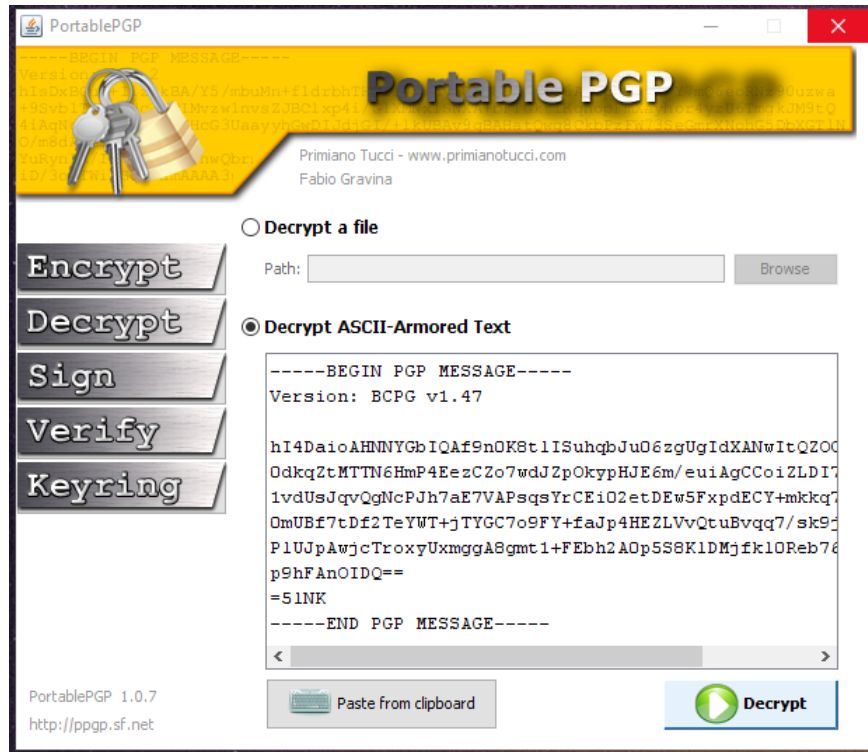
- The encrypted text will be appeared in the text editor as shown. Copy the encrypted message and paste it into your email. Then send your email.



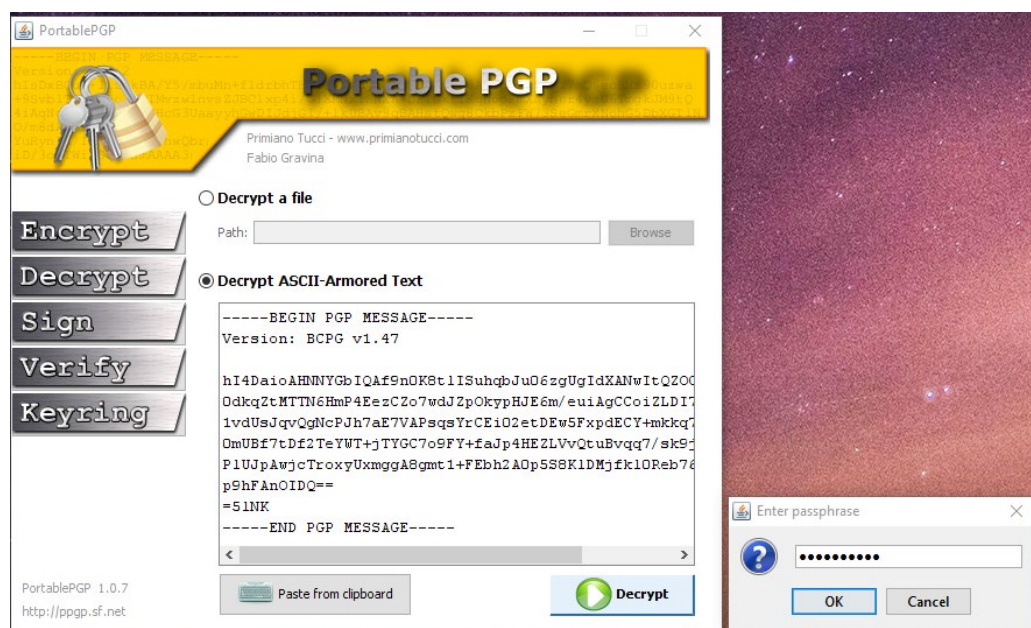
- If you received an e-mail containing an encrypted message that has been encrypted with your public keys it will look similar to the previous picture as shown in figure below.



- To read an encrypted email, click Decrypt button from PGP window, then you have to copy the email content from [----- BEGIN PGP MESSAGE -----] until [----- END PGP MESSAGE -----] and paste in **Decrypt ASCII-Armored Text** pane as shown in the picture below.



- Click Decrypt button and you will be asked to enter the passphrase to decrypt the message as depicted in the picture below.



11. Once you click OK, you will see a text editor which contains the plaintext as in the figure below. This the result for decrypted message.

