

$$P = 29 \quad Q = 31$$

$$N = (29)(31) = 899$$

$$Z = (28)(30) = 840$$

$$E = 29$$

$$D = 29$$

$$\text{Publickey} = (N, E), \quad \text{Private Key} = (N, D)$$

Letter	m	$m^e$	
G	7	$7^{29} = 3,219,905,755,813,179,726,837,607$	$C = 7^{29} \bmod 899 = 877$

$$877^{29} = 22232495220053313238550319156403346297406109462146681372806532712898863498678648395037$$

$$877^{29} \bmod 899 = 7$$

Sign/Encrypt Files - Kleopatra

## Sign / Encrypt Files


Prove authenticity (sign)

☒ Sign as: ✓ Mohammad Alhourani <C00227505@itcarlow.ie> (certified, created: 22/03/2021)

Encrypt

☐ Encrypt for me: ✓ Mohammad Alhourani <C00227505@itcarlow.ie> (certified, created: 22/03/2021)


☒ Encrypt for others: ✓ Cliona Hayden <C00225401@itcarlow.ie> (certified, OpenPGP, created: 22/03/2021)

 Please enter a name or email address...

☐ Encrypt with password. Anyone you share the password with can read the data.

Output

☐ Encrypt / Sign each file separately.

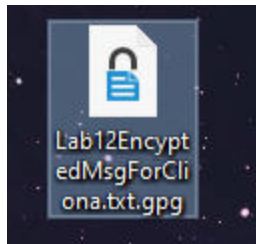
 C:/Users/neron/OneDrive/Desktop/Lab12EncryptedMsgForCliona.txt.gpg

Sign / Encrypt Cancel

Lab12EncryptedMsgForCliona.txt - Notepad

File Edit Format View Help

This is an encrypted message For Cliona Hayden



These are screenshots from cliona decrypting my message

