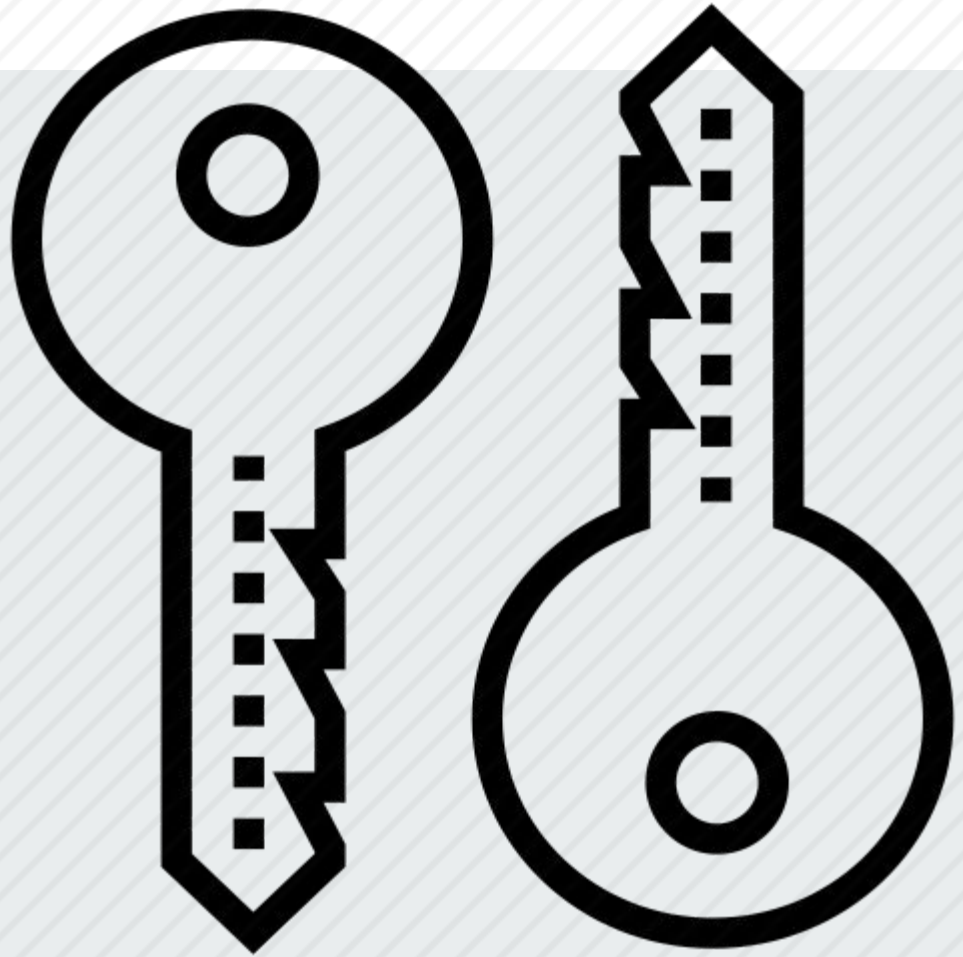




# Cryptography

Assignment Guidance  
Zip all items in and submit  
\*all passwords are 123



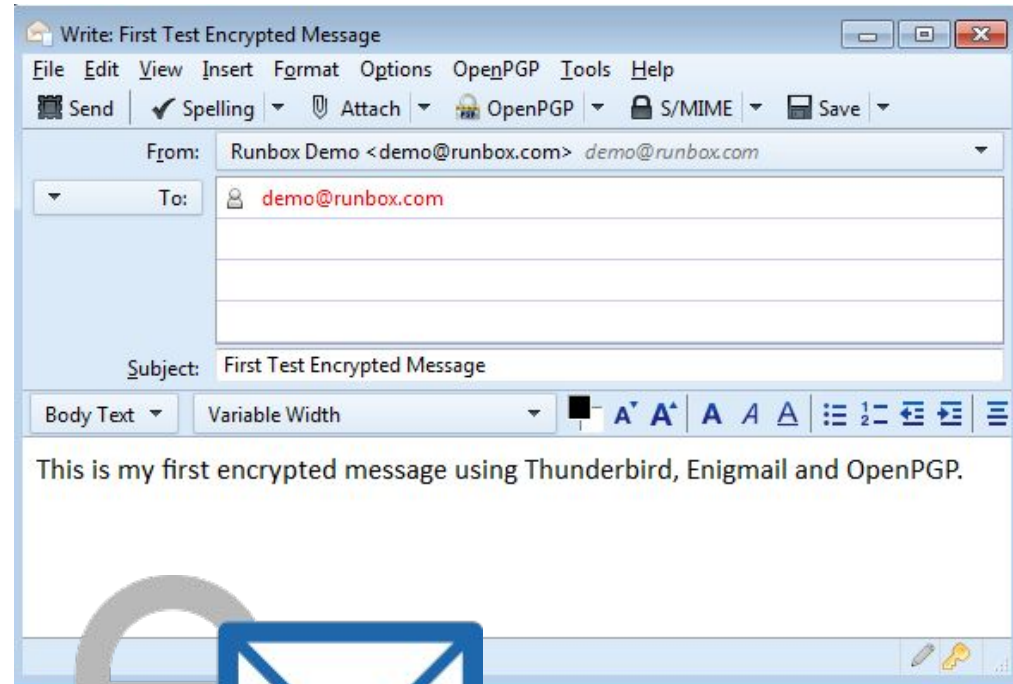
# GPG Key Generation - Part 1

Encrypt a table and submit that associated hash file as a .txt file. Use GPG to encrypt file. Attached public key and the key must be set to expire in 60 days and additional properties must be filled out such as name associated with key. SUBMIT  
ENCRYPTED TABLE AND ATTACH  
PUBLIC KEY

```
tutonics@andromeda:~/gpg-example$  
tutonics@andromeda:~/gpg-example$ gpg --clearsign file.txt  
  
You need a passphrase to unlock the secret key for  
user: "Tutonics (Tutonics - Ubuntu Tutorial Website) <tutonics@gmail.com>"  
2048-bit RSA key, ID EE74D48D, created 2012-10-31  
  
tutonics@andromeda:~/gpg-example$ cat file.txt.asc  
-----BEGIN PGP SIGNED MESSAGE-----  
Hash: SHA1  
  
This data is not meant to be encrypted, just signed!  
-----BEGIN PGP SIGNATURE-----  
Version: GnuPG v1.4.11 (GNU/Linux)  
  
iQEcBAEBAGAGBQJQmBU/AAoJEJLYkgfudNSNt2IIAMV+Wu2gLP9KFPCP7SjM4Z8x1  
CNeyauUlmVDYuGLEHn5P7qo6kjkTK/26ZsfjW6+lg3wN5TM8ECm41gPqZa3nfWx4p  
heo72Xp6vqDKs3rBqione5M4Tw4kiE2z0PGL470QTYf6rSR41Vt+2tPK+MsDFYF  
hzKnSik9LySVm80Sl1kA63fLvL+c0WGTTA/RNG4G+PQU4FQHKhL0ZIkRtPoQsGT8  
wrKvJvZ+R6VWSQJpWlnl0AAwo7q1cfVcDTdHLuL+SoGPI6kpSKE/X+8X0cyDmGtn  
AmKkvIUXY1KTXPj8TthMuJEY9TuZERkqg2tLJURUs1jX+XtCjKJ5+/YXoaJPKLs=  
=wWfh  
-----END PGP SIGNATURE-----  
tutonics@andromeda:~/gpg-example$
```

# Data in Transit - Part 2

Develop a write up on how to encrypt data in transit to ensure integrity and confidentiality. Send an encrypted email to yourself to a secondary account. Perform key exchange, trust management Capture the entire process using screenshots with text underneath. Submission must have at least 600 words. SUBMIT IN WORD DOCUMENT WITH SCREENSHOTS. APA GUIDANCE IS NOT REQUIRED.



# Steganography - Part 3

You are to embed a message into two separate photos. Capture the hash before and after for each photo. In the embedded messages answer the two questions.

**Question 1: What is the positive uses of steganography? No less than 500 words**

**Question 2: What are the negative uses of steganography? No less than 500 words**

**SUBMIT UNENCRYPTED PHOTO 1 & 2,  
ENCRYPTED PHOTO 1 & 2. PASSWORD  
IS 123.**



**BEFORE STEGANOGRAPHY**



**AFTER STEGANOGRAPHY**