Encryption decryption using PGP =python-gnupg:

Hello new data added-test

https://www.saltycrane.com/blog/2011/10/python-gnupg-gpg-example/#:~:text=python%2Dgnupg%20is%20a%20Python,see%20the%20python%2Dgnupg%20documentation.

**Encryption and Decryption**

1.Encrypt a test with key (password ) then it will be converted to cipher test.

2.generate 2 pair of keys (public private).

3.encrypt with public key and decrypt with private key.

4.if you are receiving file from others then give your generated public key to them, the they will encrypt with public key and give it to you, now you decrypt with your private key.

5.public key we can share but not private key.

**Simple encryption in python :**

message='fleet incentives@#$'

alphabet='abcdefghijklmnopqrstuvwxyz !@#$%^&\*()~`,./?><:";[]{}\|=+-\_'

key=4

encrypt=""

for i in message:

position=alphabet.find(i)

newposition=position+key

encrypt+=alphabet[newposition]

print(encrypt)

####decryption#######

decrypt=''

for j in encrypt:

pos=alphabet.find(j)

npos=pos-key

decrypt+=alphabet[npos]

print(decrypt)

ENCRYPTION USING FERNET

from cryptography.fernet import Fernet

key=Fernet.generate\_key()

import base64

####PROTECT KEY WITH PASSWORD#######

from cryptography.hazmat.backends import default\_backend

from cryptography.hazmat.primitives import hashes

from cryptography.hazmat.primitives.kdf.pbkdf2 import PBKDF2HMAC

password\_provided = "password" # This is input in the form of a string

password = password\_provided.encode() # Convert to type bytes

salt = b'salt\_' # CHANGE THIS - recommend using a key from os.urandom(16), must be of type bytes

kdf = PBKDF2HMAC(

algorithm=hashes.SHA256(),

length=32,

salt=salt,

iterations=100000,

backend=default\_backend()

)

key = base64.urlsafe\_b64encode(kdf.derive(password)) # Can only use kdf once

########write key to file########

file = open('key.key', 'wb') # Open the file as wb to write bytes

file.write(key) # The key is type bytes still

file.close()

#read key from file

file = open('key.key', 'rb') # Open the file as wb to read bytes

key = file.read() # The key will be type bytes

file.close()

print(key,'\n')

########FILE FROM MY PC##########

f = open("C://Users\MadhusudhanChilukuri\Desktop\\MADHU.txt", "r")

message = f.read().encode()######CONVERT CODE TO BINARY FORMAT

f = Fernet(key)

encrypted = f.encrypt(message)

print('encrypted data:',encrypted,'\n')

decrypt=f.decrypt(encrypted)

print('decrypted data:',decrypt)