

```
from Crypto import Random import base64 from Crypto.PublicKey import RSA from
Crypto.Cipher import PKCS1_OAEP random_generator = Random.new().read key =
RSA.generate(2048, random_generator) private_key, public_key = key, key.publickey()
plain_text="this is the message" cipher = PKCS1_OAEP.new(public_key)
encrypted_text=cipher.encrypt(plain_text.encode("utf8")) encrypted_text64 =
base64.b64encode(encrypted_text).decode('utf-8') print(f"\n\nprivate
key:\n{private_key.export_key(format='PEM')}") print(f"\n\npublic
key:\n{public_key.export_key(format='PEM')}") print(f"\n\nencrypted text:\n{encrypted_text64}")
cipher = PKCS1_OAEP.new(private_key) decrypted_text
=cipher.decrypt(encrypted_text).decode("utf8") print(f"\n\ndecrypted text:\n{decrypted_text}")
```