

E:\from cryptography2.py

```
1 import rsa
2
3 # generate public and private keys with
4 # rsa.newkeys method, this method accepts
5 # key length as its parameter
6 # key length should be atleast 16
7 publicKey, privateKey = rsa.newkeys(512)
8
9 # this is the string that we will be encrypting
10 message = "hello geeks"
11
12 # rsa.encrypt method is used to encrypt
13 # string with public key string should be
14 # encode to byte string before encryption
15 # with encode method
16 encMessage = rsa.encrypt(message.encode(),
17                             publicKey)
18
19 print("original string: ", message)
20 print("encrypted string: ", encMessage)
21
22 # the encrypted message can be decrypted
23 # with ras.decrypt method and private key
24 # decrypt method returns encoded byte string,
25 # use decode method to convert it to string
26 # public key cannot be used for decryption
27 decMessage = rsa.decrypt(encMessage, privateKey).decode()
28
29 print("decrypted string: ", decMessage)
30
```