import pyDes

from time import time

# For Python3, you'll need to use bytes, i.e.:

#key -> Bytes containing the encryption key. 8 bytes for DES, 16 or 24 bytes

# for Triple DES

#mode -> Optional argument for encryption type, can be either pyDes.ECB

# (Electronic Code Book), pyDes.CBC (Cypher Block Chaining)

#IV -> Optional Initial Value bytes, must be supplied if using CBC mode.

# Must be 8 bytes in length.

#pad -> Optional argument, set the pad character (PAD\_NORMAL) to use

# during all encrypt/decrypt operations done with this instance.

#padmode -> Optional argument, set the padding mode (PAD\_NORMAL or

# PAD\_PKCS5) to use during all encrypt/decrypt operations done

# with this instance.

data = input("Please enter plain text for encryption:")

keystring=input("Enter 16/24 byte string for key generation:")

k = pyDes.triple\_des(keystring, padmode=pyDes.PAD\_PKCS5)

e = k.encrypt(data)

print ("cipher text: %r" % e)

#%r to be useful for printing a string of unknown encoding

print ("plain text: %r" % k.decrypt(e))

t1 = time()

for i in range(1000):

e = k.encrypt(data)

t2 = time()

print("Elapsed time for 1,000 encryptions: {:0.3f}s".format(t2 - t1))