Code :

import math

def isprime(num):

if num > 1:

for i in range(2, int(num/2)+1):

if (num % i) == 0:

return False

break

else:

return True

else:

return False

while 1:

p = int(input("Enter prime number P:"))

q = int(input("Enter prime number Q:"))

if isprime(p) is True and isprime(q) is True:

break

else:

print("One of them is not prime number please enter again:")

n = p\*q

phin = (p-1)\*(q-1)

while 1:

e = int(input("Enter value of e:"))

if e > 1 and e < phin and math.gcd(e, phin) == 1:

break

else:

print("GCD not 1 please try again:")

k = 0

d = (1+(k\*phin))/e

while not (d).is\_integer() is True:

k = k+1

d = (1+(k\*phin))/e

p = int(input("Enter message:"))

c = pow(p, e, phin)

print("CipherText:", c)

p = pow(c, int(d), phin)

print("Message:", p)

Output :

