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Batch: A1

CODE:

* Encryption:

def encrypt(plaintext, key):

key\_len = len(key)

#ord is to give the unicode for the particular letter encountered in the string.

key\_as\_int = [ord(i) for i in key]

plaintext\_int = [ord(i) for i in plaintext]

ciphertext = ''

#applying the formula for encryption

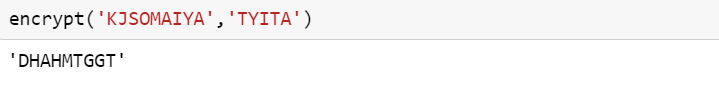
for i in range(0,len(plaintext\_int)):

value = (plaintext\_int[i] + key\_as\_int[i % key\_len]) % 26

ciphertext += chr(value + 65)

return ciphertext

OUTPUT:



* Decryption:

def decrypt(ciphertext,key):

key\_len=len(key)

key\_as\_int=[ord(i) for i in key]

ciphertext\_int = [ord(i) for i in ciphertext]

plaintext = ''

#applying the formula for decryption

for i in range(0,len(ciphertext\_int)):

value = (ciphertext\_int[i] - key\_as\_int[i % key\_len]) % 26

plaintext += chr(value + 65)

return plaintext

OUTPUT:



