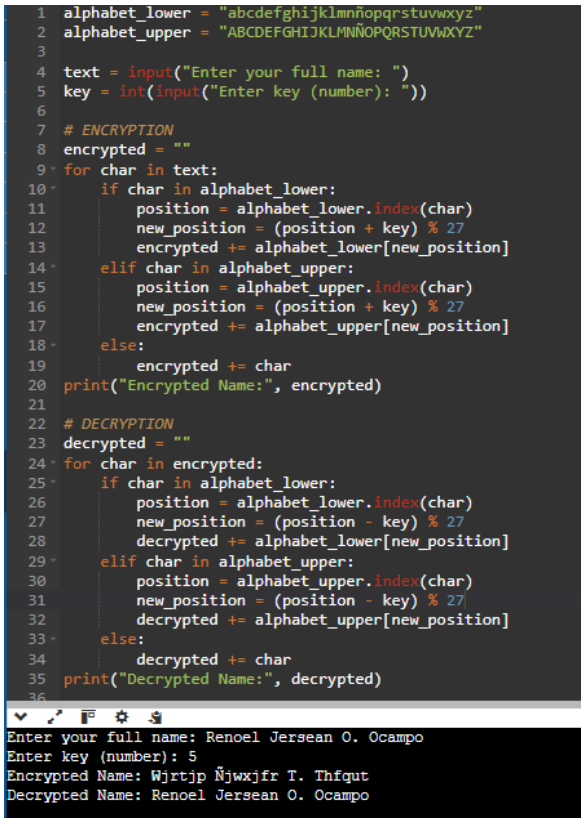
Name: Renoel Jersean O. Ocampo
Course & Section: BSIT 4-3



```
alphabet_lower = "abcdefghijklmnñopqrstuvwxyz"
alphabet_upper = "ABCDEFGHIJKLMNÑOPQRSTUVWXYZ"

text = input("Enter your full name: ")
key = int(input("Enter key (number): "))

# ENCRYPTION
encrypted = ""
for char in text:
    if char in alphabet_lower:
        position = alphabet_lower.index(char)
        new_position = (position + key) % 27
        encrypted += alphabet_lower[new_position]
    elif char in alphabet_upper:
        position = alphabet_upper.index(char)
        new_position = (position + key) % 27
        encrypted += alphabet_upper[new_position]
    else:
        encrypted += char
print("Encrypted Name:", encrypted)

# DECRYPTION
decrypted = ""
for char in encrypted:
    if char in alphabet_lower:
        position = alphabet_lower.index(char)
        new_position = (position - key) % 27
        decrypted += alphabet_lower[new_position]
    elif char in alphabet_upper:
        position = alphabet_upper.index(char)
        new_position = (position - key) % 27
        decrypted += alphabet_upper[new_position]
    else:
        decrypted += char
print("Decrypted Name:", decrypted)
```

```
Enter your full name: Renoel Jersean O. Ocampo
Enter key (number): 5
Encrypted Name: Wjrtjp Ñjwxjfr T. Thfqut
Decrypted Name: Renoel Jersean O. Ocampo
```

EXPLANATION:
alphabet_uppercase and *alphabet_lowercase* are two variables to store the letters and are used to find the index of the character to shift using the key. *input()* are used to allow the user to type data and use *int()* before the *input()* that converts *string* to *integer*.

For encryption
An *encrypted* variable is used to store the encrypted text. then the program will start a *for loop* to go through each of the character that the user inputs and starts *conditional statement* for lowercase, if character is lowercase it will find the *position* from 0-26, and after that it will shift forward to a *new_position* with the key that the user inputs, and after getting the *new_position* the new position will be stored in the *encrypted* variable. So, the same flow goes with checking for *uppercase* letters. And display the encrypted text with the use of print.

For decryption
A decrypted variable is used to store the decrypted text. The program will start a *for loop* to get the stored encrypted text through the *encrypted* variable. The same flow goes for checking for *lowercase* and *uppercase*, and finding its position from 0-26, but instead of going forward with the use of the key, it will be subtracted to shift backward from the positions of the encrypted variable. And after that the program will display the decrypted or original text with the use of print.