***LAB # 01***

***CAESAR CIPHER***

print(' ')

print('--------------------------CAESAR CIPHER PROGRAM------------------------------')

print(' ')

#Creating an ENCRYPTION Function

def encrypt(text,shift): #Passsing arguments

result = "" # initialize an empty string

for char in text :

if char.isupper(): #set condition to chk

result+= chr((ord(char) + shift -65 )% 26 + 65) #Formula for upper case

elif char.islower(): #for lower case

result+= chr((ord(char) + shift -95)% 26 + 95) # for Lowercase

else :

result += char #for space

return result #return encrypt txt

def decrypt(text,shift):

result = ""

for char in text :

if char.isupper():

result+= chr((ord(char)- shift -65 ) % 26 + 65 )

elif char.islower():

result+= chr((ord(char)- shift - 97) % 26 + 97 )

else :

result += char

return result

def get\_input(): # create a fun

text = input("Enter Text: ")

shift = int(input("Enter Shift Value "))

return text, shift

while True: # keep ask the option until user exit it

print ("What Do You Want: ")

action = input("Enter 'E' for Encryption, 'D' for Decryption, or 'X' to Exit: ").lower()

if action == 'x' :

break

elif action =='e' : #ENC

text, shift = get\_input() #gwt shift and text from user

encrypted\_text = encrypt(text,shift)

print("Encrypted Text:", encrypted\_text)

elif action == 'd': #DEC

text , shift = get\_input()

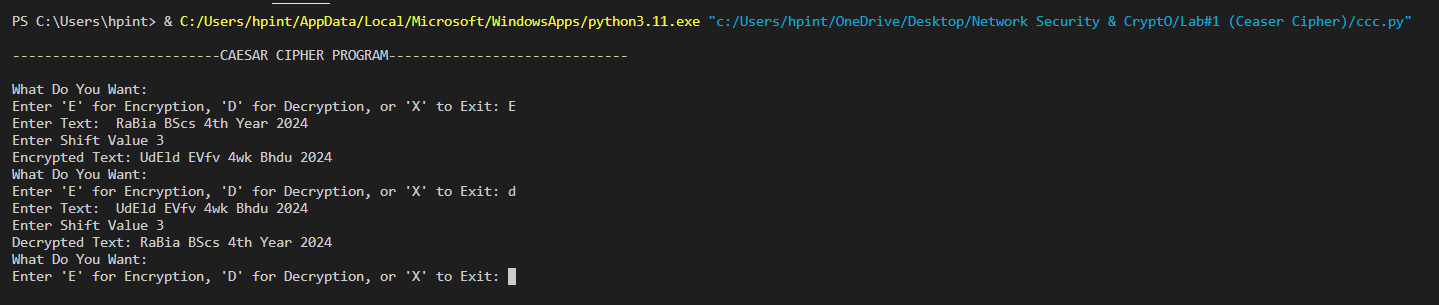
decrypted\_text =decrypt(text,shift)

print("Decrypted Text:", decrypted\_text)

else :

print("Invalid input. Please enter 'E' for Encryption, 'D' for Decryption, or 'X' to Exit.")

***OUTPUT***

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