**Practical NO : 1(INS)**

def caesar\_cipher\_encrypt(text, shift):

encrypted\_text = ""

for char in text:

if char.isalpha(): # Only shift alphabetic characters

shifted = ord(char) + shift

if char.islower():

if shifted > ord('z'):

shifted -= 26

elif shifted < ord('a'):

shifted += 26

elif char.isupper():

if shifted > ord('Z'):

shifted -= 26

elif shifted < ord('A'):

shifted += 26

encrypted\_text += chr(shifted)

else:

encrypted\_text += char # Non-alphabetic characters remain the same

return encrypted\_text

def caesar\_cipher\_decrypt(text, shift):

return caesar\_cipher\_encrypt(text, -shift)

# Example usage:

text = "Hello, World!"

shift = 3

encrypted\_text = caesar\_cipher\_encrypt(text, shift)

decrypted\_text = caesar\_cipher\_decrypt(encrypted\_text, shift)

print("Original text:", text)

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

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