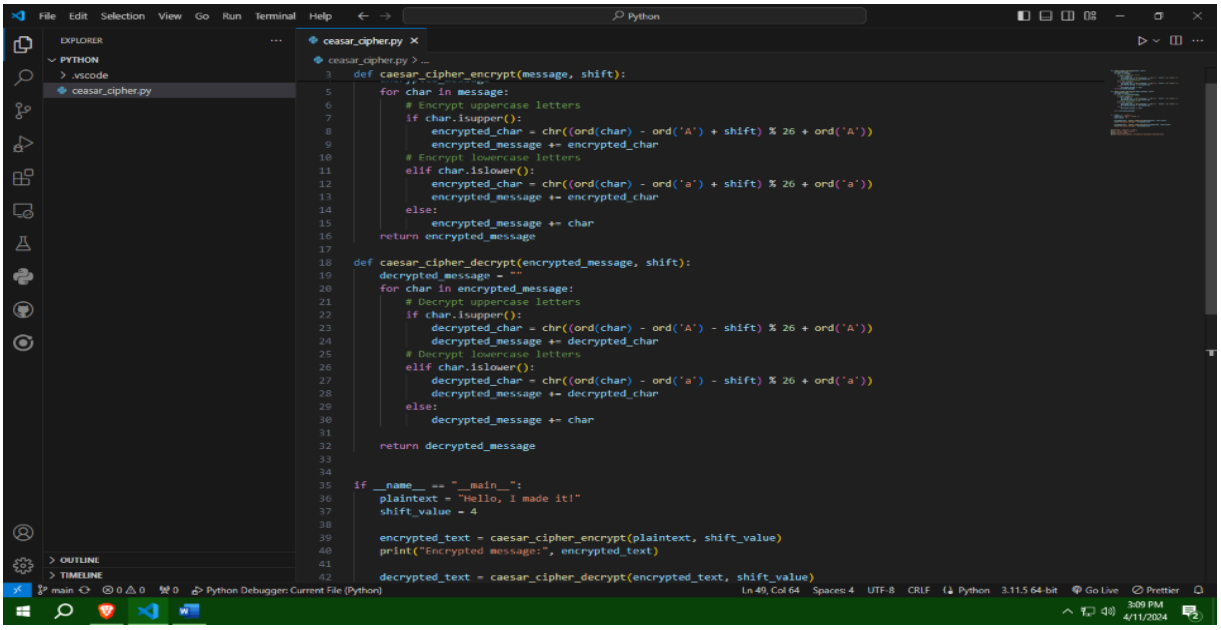
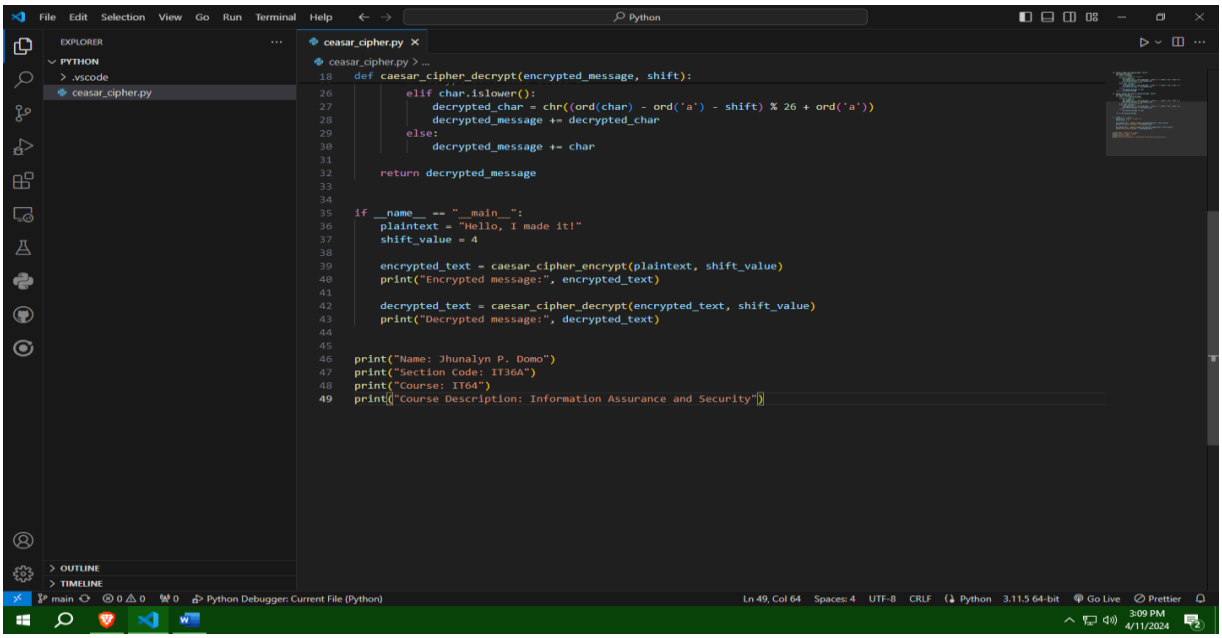
INTRODUCTION

The Caesar cipher is a simple encryption technique that was used by Julius Caesar to send secret messages to his allies. It works by shifting the letters in the plaintext message by a certain number of positions, known as the “shift” or “key”.

Screenshots

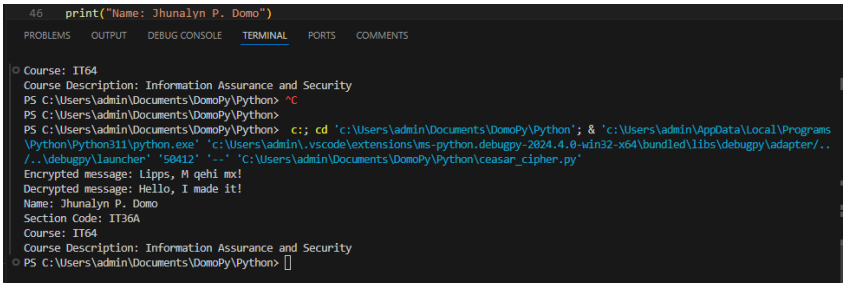


```
def caesar_cipher_encrypt(message, shift):
    encrypted_message = ""
    for char in message:
        # Encrypt uppercase letters
        if char.isupper():
            encrypted_char = chr((ord(char) - ord('A') + shift) % 26 + ord('A'))
            encrypted_message += encrypted_char
        # Encrypt lowercase letters
        elif char.islower():
            encrypted_char = chr((ord(char) - ord('a') + shift) % 26 + ord('a'))
            encrypted_message += encrypted_char
        else:
            encrypted_message += char
    return encrypted_message

def caesar_cipher_decrypt(encrypted_message, shift):
    decrypted_message = ""
    for char in encrypted_message:
        # Decrypt uppercase letters
        if char.isupper():
            decrypted_char = chr((ord(char) - ord('A') - shift) % 26 + ord('A'))
            decrypted_message += decrypted_char
        # Decrypt lowercase letters
        elif char.islower():
            decrypted_char = chr((ord(char) - ord('a') - shift) % 26 + ord('a'))
            decrypted_message += decrypted_char
        else:
            decrypted_message += char

    return decrypted_message

if __name__ == "__main__":
    plaintext = "Hello, I made it!"
    shift_value = 4

    encrypted_text = caesar_cipher_encrypt(plaintext, shift_value)
    print("Encrypted message:", encrypted_text)

    decrypted_text = caesar_cipher_decrypt(encrypted_text, shift_value)
```



```
def caesar_cipher_decrypt(encrypted_message, shift):
        elif char.islower():
            decrypted_char = chr((ord(char) - ord('a') - shift) % 26 + ord('a'))
            decrypted_message += decrypted_char
        else:
            decrypted_message += char

    return decrypted_message

if __name__ == "__main__":
    plaintext = "Hello, I made it!"
    shift_value = 4

    encrypted_text = caesar_cipher_encrypt(plaintext, shift_value)
    print("Encrypted message:", encrypted_text)

    decrypted_text = caesar_cipher_decrypt(encrypted_text, shift_value)
    print("Decrypted message:", decrypted_text)


print("Name: Jhunalyn P. Domo")
print("Section Code: IT36A")
print("Course: IT64")
print("Course Description: Information Assurance and Security")
```

Result


46 print("Name: Jhunalyn P. Domo")
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS
Course: IT64
Course Description: Information Assurance and Security
PS C:\Users\admin\Documents\DomoPy\Python> ^C
PS C:\Users\admin\Documents\DomoPy\Python>
PS C:\Users\admin\Documents\DomoPy\Python> c:; cd 'c:\Users\admin\Documents\DomoPy\Python'; & 'c:\Users\admin\AppData\Local\Programs\Python\Python311\python.exe' 'c:\Users\admin\.vscode\extensions\ms-python.debugpy-2024.4.0-win32-x64\bundled\libs\debugpy\adapter/../..\debugpy\launcher' '50412' '--' 'C:\Users\admin\Documents\DomoPy\Python\ceasar_cipher.py'
Encrypted message: Lipps, M qehi mx!
Decrypted message: Hello, I made it!
Name: Jhunalyn P. Domo
Section Code: IT36A
Course: IT64
Course Description: Information Assurance and Security
PS C:\Users\admin\Documents\DomoPy\Python>