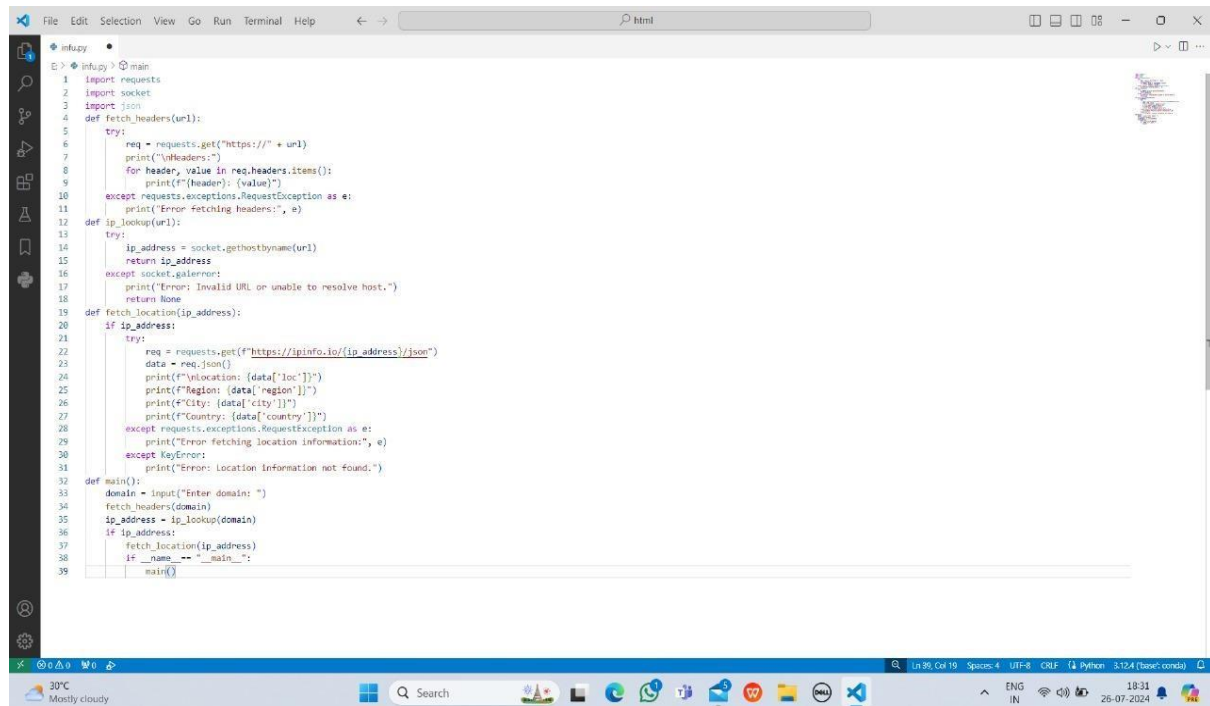


SOURCE PROGRAM

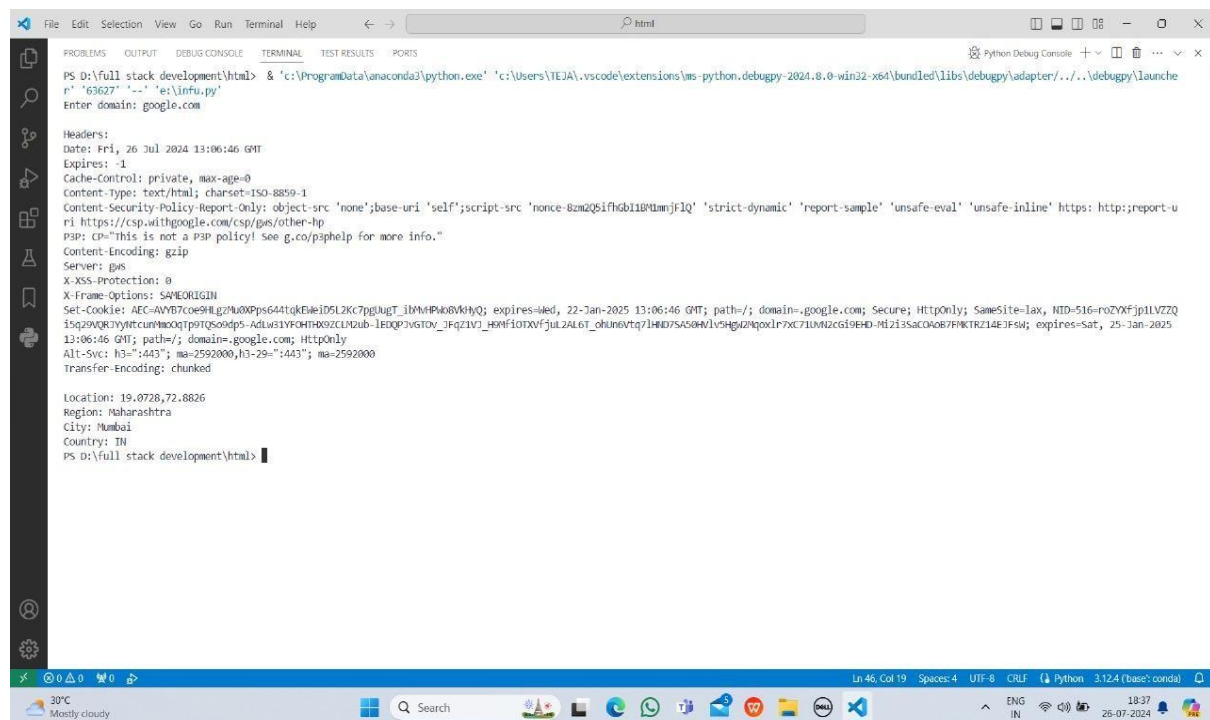
```
import requests import
socket import json def
fetch_headers(url):
    try:
        req = requests.get("https://" + url)
        print("\nHeaders:") for header, value in
        req.headers.items():
            print(f'{header}: {value}')
    except requests.exceptions.RequestException as e:
        print("Error fetching headers:", e)
def ip_lookup(url): try:
    ip_address = socket.gethostbyname(url) return
    ip_address
except socket.gaierror:
    print("Error: Invalid URL or unable to resolve host.") return
    None
def fetch_location(ip_address):
    if ip_address: try:
        req = requests.get(f'https://ipinfo.io/{ip_address}/json')
        data = req.json() print(f'\nLocation: {data["loc"]}')
        print(f'Region: {data["region"]}') print(f'City:
        {data["city"]}') print(f'Country: {data["country"]}')
    except requests.exceptions.RequestException as e:
        print("Error fetching location information:", e)
    except KeyError:
        print("Error: Location information not found.")
def main(): domain = input("Enter domain: ")
fetch_headers(domain) ip_address = ip_lookup(domain)
if ip_address:
    fetch_location(ip_address)
if __name__ == "__main__":
    main()
```

SCREENSHOTS OF INFORMATION GATHERING TOOL:



```
1 import requests
2 import socket
3 import json
4 def fetch_headers(url):
5     try:
6         req = requests.get("https://" + url)
7         print("\nHeaders:")
8         for header, value in req.headers.items():
9             print(f"{header}: {value}")
10    except requests.exceptions.RequestException as e:
11        print("Error fetching headers:", e)
12 def ip_lookup(url):
13     try:
14         ip_address = socket.gethostbyname(url)
15         return ip_address
16    except socket.gaierror:
17        print("Error: Invalid URL or unable to resolve host.")
18        return None
19 def fetch_location(ip_address):
20     if ip_address:
21         try:
22             req = requests.get(f"https://ipinfo.io/{ip_address}/json")
23             data = req.json()
24             print(f"Location: {data['loc']}")
25             print(f"Region: {data['region']}")
26             print(f"City: {data['city']}")
27             print(f"Country: {data['country']}")
28         except requests.exceptions.RequestException as e:
29             print("Error fetching location information:", e)
30         except KeyError:
31             print("Error: Location information not found.")
32 def main():
33     domain = input("Enter domain: ")
34     fetch_headers(domain)
35     ip_address = ip_lookup(domain)
36     if ip_address:
37         fetch_location(ip_address)
38     if __name__ == "__main__":
39         main()
```

OUTPUT:



```
PS D:\full stack development\html> & "c:\ProgramData\anaconda3\python.exe" "c:\Users\TEJA\.vscode\extensions\ms-python.debugpy-2024.8.0-win32-x64\bundle\libs\debugpy\adapter\..\..\debugpy\launcher
r" "65627" "-." "e:\infuz.py"
Enter domain: google.com

Headers:
Date: Fri, 26 Jul 2024 13:06:46 GMT
Expires: -1
Cache-Control: private, max-age=0
Content-Type: text/html; charset=ISO-8859-1
Content-Security-Policy-Report-Only: object-src 'none';base-uri 'self';script-src 'nonce-8zmQ5ifhGb1B8t1mJf1Q' 'strict-dynamic' 'report-sample' 'unsafe-eval' 'unsafe-inline' https: http:report-u
ri https://csp.withgoogle.com/csp/gws/other-hp
P3P: cp="This is not a P3P policy! See g.co/p3phelp for more info."
Content-Encoding: gzip
Server: gws
X-XSS-Protection: 0
X-Frame-Options: SAMEORIGIN
Set-Cookie: AEC=AYVb7Coe9Hlg7Wu0WpPs64AtgKE4eID5L2K7pgLugT_1VvMHP408V4HyQ; expires=Wed, 22-Jan-2025 13:06:46 GMT; path=/; domain=.google.com; Secure; HttpOnly; SameSite= lax; MID=516-roZYXfjp1LVZQ
15q29VQR7yW4tCunMaoQ7p0TQ504dpS-AdUvS1VCHTH9ZCLN2ub-LEDQP7VSTOV_fQzTVI_H5Mf10TXVfjU2AL6T_chuNvTq7L4u07SAS0Hv1V5HgU2Xq0r7XC7LUM2G519HD-HI213SAC0A087FKTRZ14EJFSu; expires=Sat, 25-Jan-2025
13:06:46 GMT; path=/; domain=.google.com; HttpOnly
Alt-Svc: h3=":443"; ma=2592000,h3-29=":443"; ma=2592000
Transfer-Encoding: chunked

Location: 19.0728,72.8826
Region: Maharashtra
City: Mumbai
Country: IN
PS D:\full stack development\html>
```