#) Setup

- **You will see following files in the zip file**

Name	Date modified
∨ Today	
kmlSample	11/13/2024 12:37 PM
ntv.py	11/13/2024 12:36 PM
.DS_Store	11/13/2024 12:35 PM
GeoLiteCity.dat	11/13/2024 12:35 PM
NTV_readme-1	11/13/2024 12:35 PM
tempCodeRunnerFile.py	11/13/2024 12:35 PM
wire	11/13/2024 12:35 PM
wire1	11/13/2024 12:35 PM

(some of the files here might be changed like those pcap file and NTV_readme)

- **Open the folder in your code editor. I used VS code for this project.**
- **Then open ntv.py**

#) Things to install(Dependencies)

→ use the following to install scapy, pygeoip and easygui into your code editor.
- pip install scapy
- pip install pygeoip
- pip install easygui
→ If pip does not work for you, you can try using pip3 as well.
- If you don't have pip or pip3 installed yet then, you will need to install pip or pip3 first. Below is the link to install pip
- https://www.youtube.com/watch?v=ENHnfQ3cBQM
  -

#) Executable file
→ ntv.py

#) Step to test the program
Please use the .pcap or .pcapng file provided in the zip folder:

i) After you extract the zip file. install dependencies and Run the program ntv.py, this will open the file selector using easygui. (It opens the path of the folder you opened on vs code by default)

ii) select the .pcap or .pcapng file you want to run. I have provided a couple of .pcap files along with the program. **use wire.pcap or wire1.pcapng**
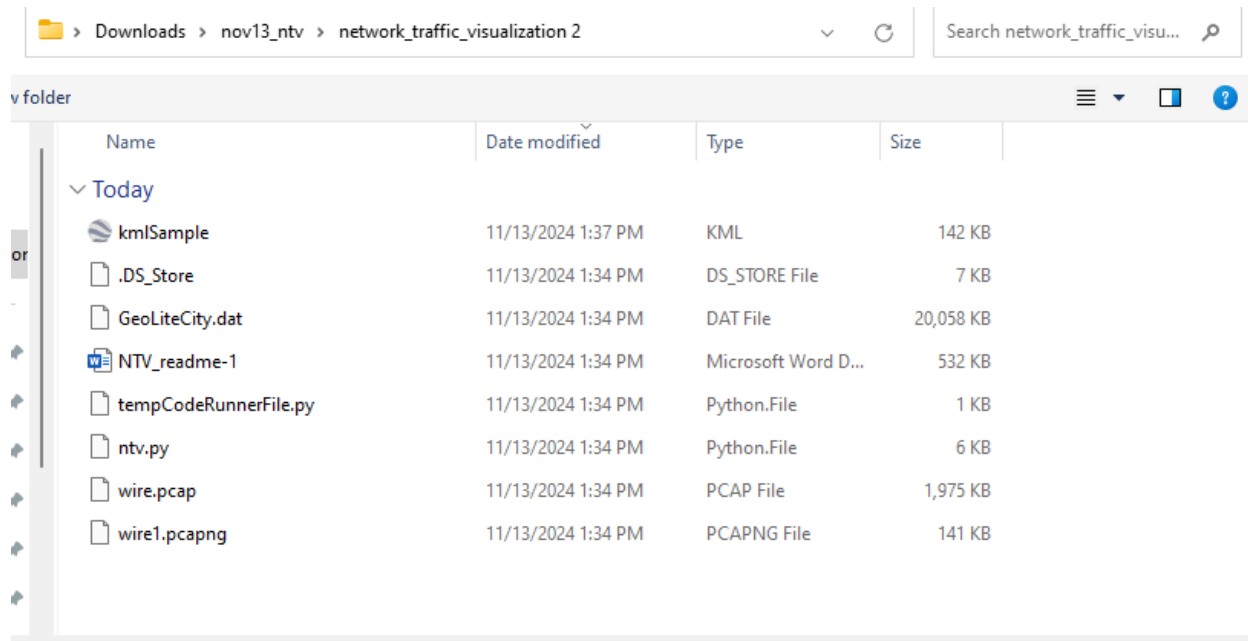

iii) After you select, .pcap file, the program will run and save files into **KmlSample.kml.** If it detects ip outside of **USA, it will print the dst ip in terminal as shown below:**

```
Detected outside IP: 202.45.147.252
Detected outside IP: 202.45.147.252
Detected outside IP: 202.45.147.252
KML file saved as 'C:\Users\T00664996\Downloads\nov13_ntv\network_traffic_visualization
2\kmlSample.kml'.
Opening Google Maps in your browser...
PS C:\Users\T00664996\Downloads\nov13 ntv>
```
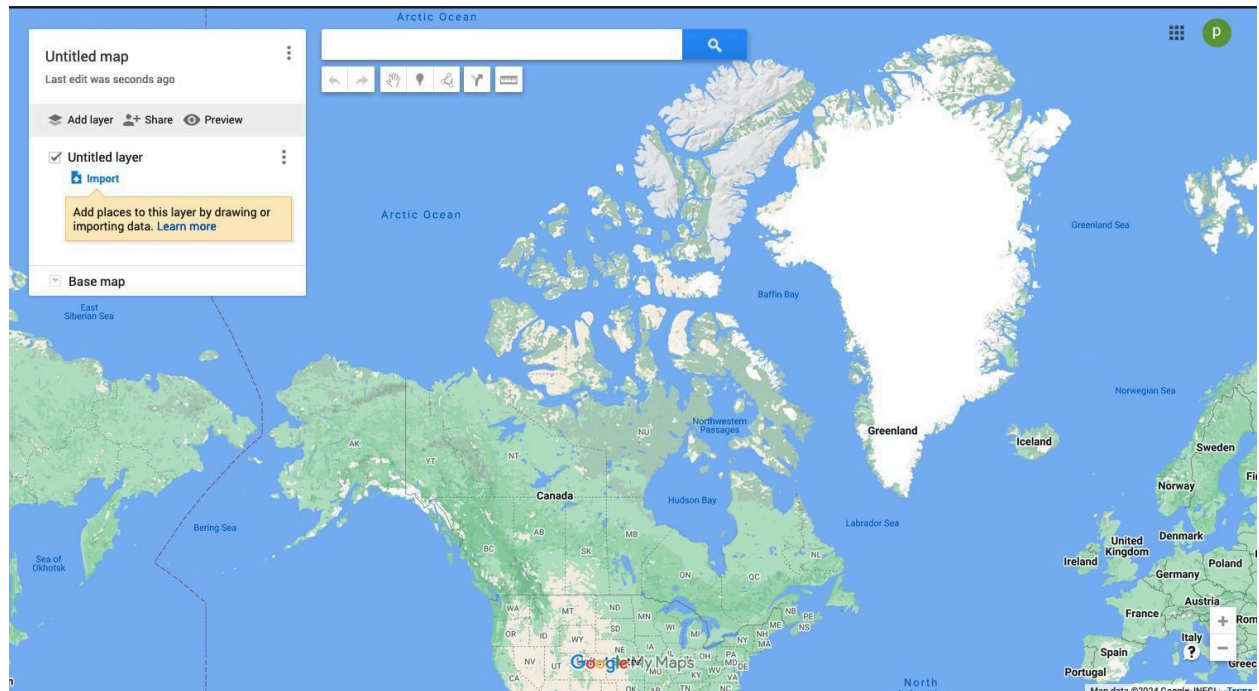
iv) After execution, it will automatically open the link to google mymaps.

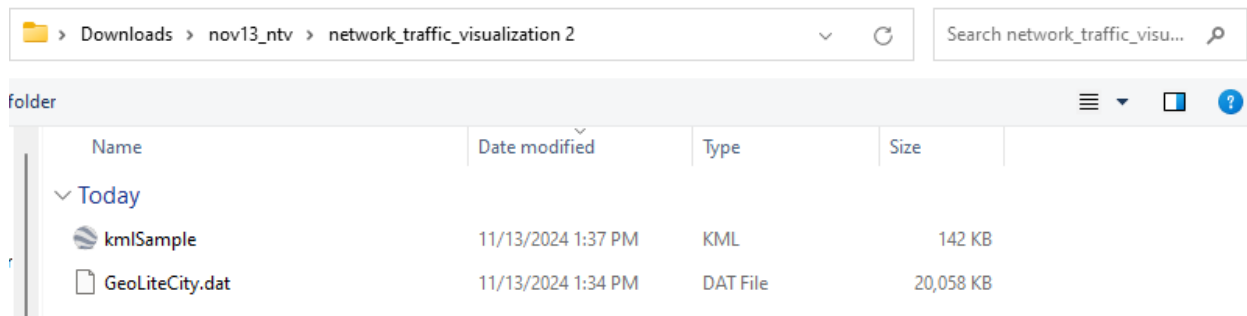You might need to log into your google account first.
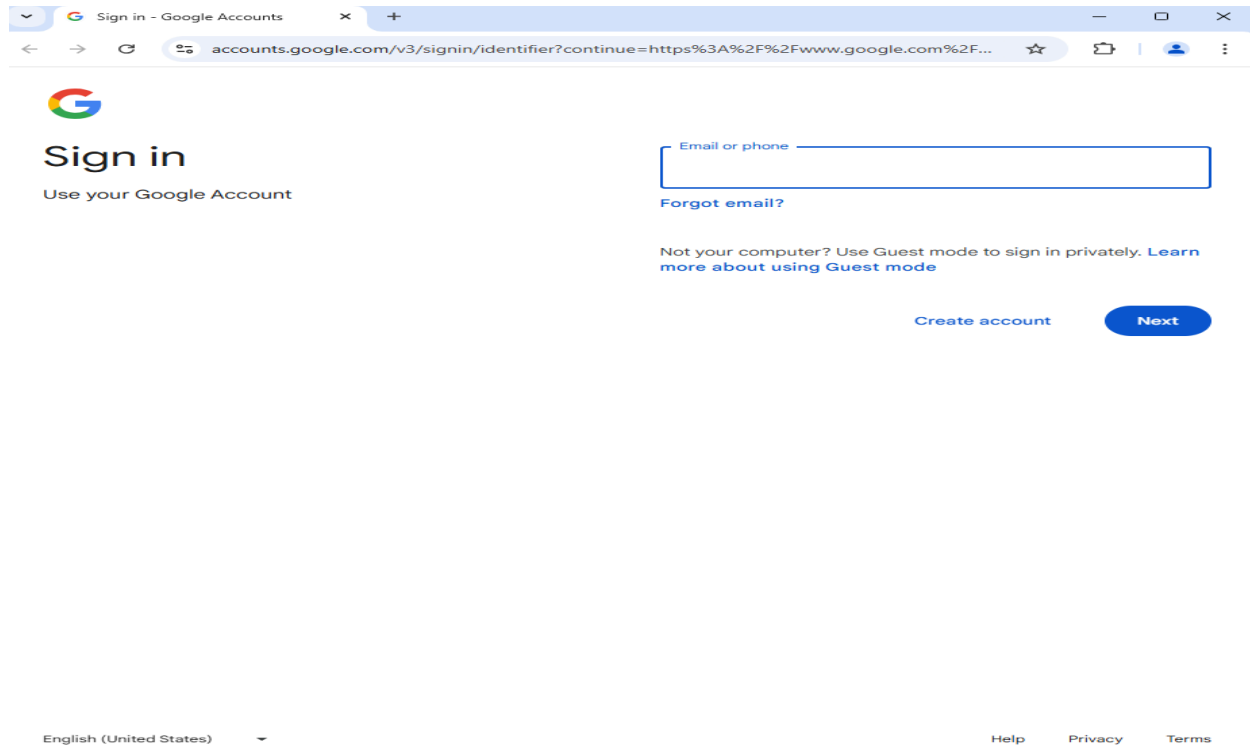
once you login you should see following interface, but without any maps
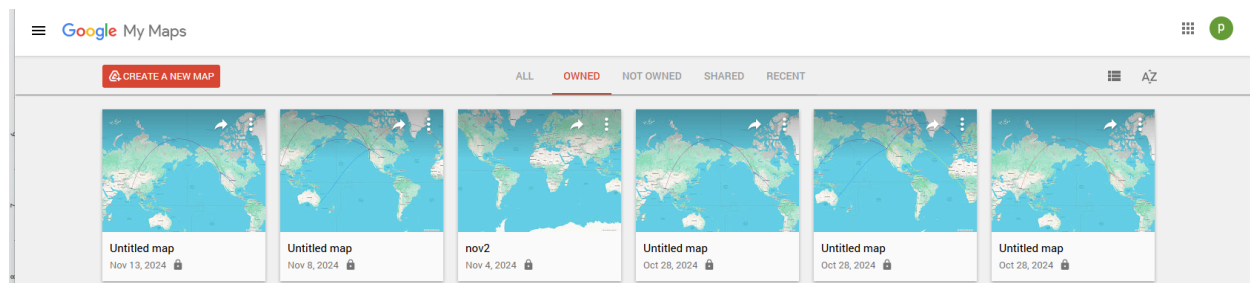
v) After this you click on create new map of top left: you will see following interface

vi) Then click on the import button -> browse. Then select the KmlSample.kml which will be in the same folder as the ntv.py(executable file you just ran).

vii) After that you should be able to see following result in google my maps:
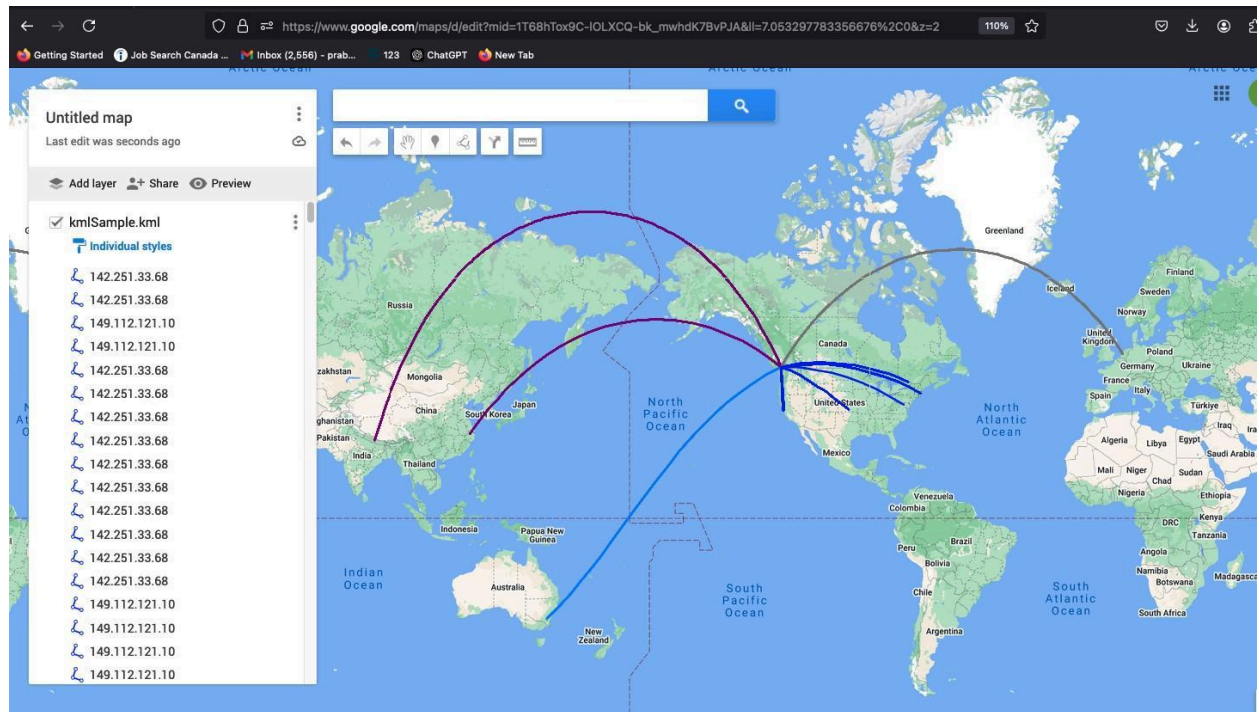
above image was for the .pcap file, i could not include for my proof of concept because it was too large to fit in 20mb
so i used some simpler ones which looks like below:
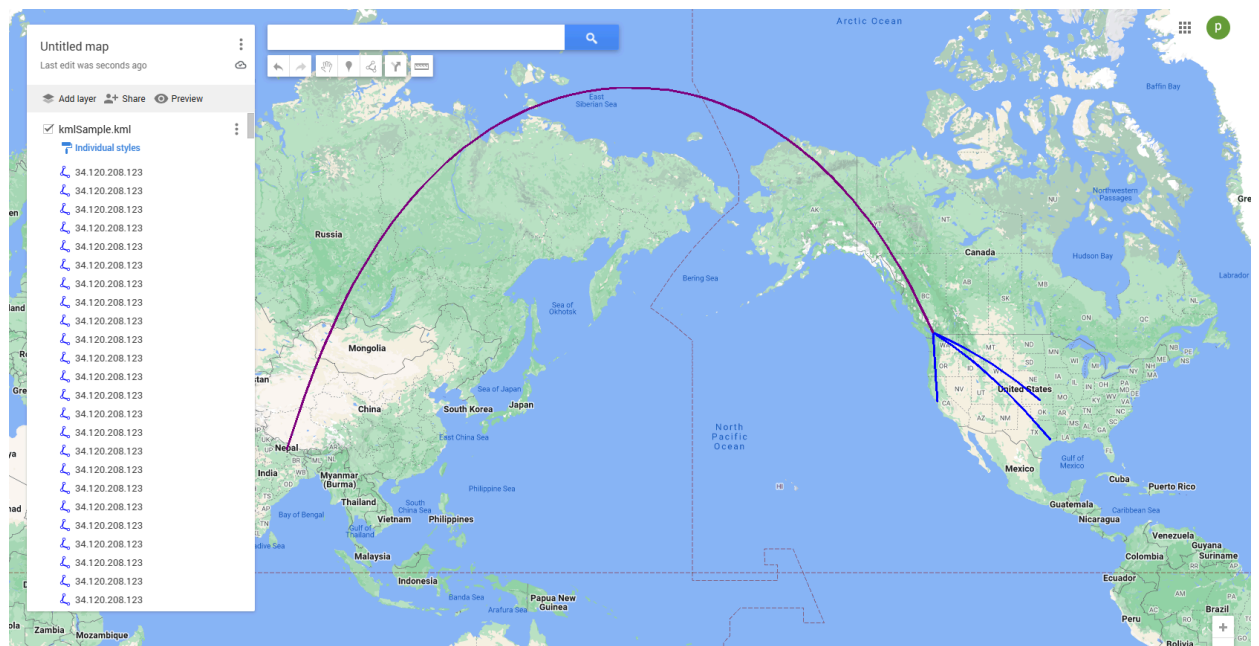
you can still see color coding based on continent with that one ip that is connected to Nepal which is in asia