CSCI 651 - Project 1 (Name: Vinay Jain, vj9898)

README:-

- 1) Copy the python program "pktsniffer.py" into any directory of your choice.
- 2) Open the terminal and navigate to the folder where you copied the python file.
- 3) Install "scapy" library in your system before proceeding.
 - a) Using pip or pip3 I had to use pip3
 - i) pip3 install scapy
- 4) Use the following command if running from a terminal (I ran it via a mac terminal) using python or python 3 python 3 is preferred
 - a) python3 pktsniffer.py -r complete_path_to_the_pcap_file -c 10

NOTE: Always have to provide the exact number of arguments as specified in the assignment pdf. Any less than that or greater than that will result in error.

Below is a screenshot of the execution of the program:

```
[vinay_jain@Vinays-MBP ~ % cd Desktop
[vinay_jain@Vinays-MBP Desktop % python3 pktsniffer.py -r /Users/vinay_jain/Desktop/tr
y.pcap host 2.2.2.2
WARNING: No IPv4 address found on anpi1 !
WARNING: No IPv4 address found on anpi0!
WARNING: more No IPv4 address found on en3 !
The Program Begins.....
4 additional arguments (apart from program name required to run as per condition)
Answer To Argument for the packet = False
ETHER: --- Ether Header
ETHER:
ETHER: Packet Size = 723 bytes
ETHER: Destination = B0:BE:83:5A:D6:F4,
ETHER: Source = 30:B6:4F:86:FE:2D,
ETHER: Ethertype = 86DD (IP)
ETHER:
IP: ---- IP HEADER ----
IP:
IP: Version = 6
IP: Header Length = 40 bytes
IP: Type of service = 0x00
IP: Flow Label 000000,
IP: Payload Length 669 bytes,
IP: Protocol 17 (UDP),
IP: Hop Limit 61,
IP: Source Address: 2607:F8B0:4006:0823:0000:0000:0000:200E,
IP: Destination Address: 2620:008D:8000:1074:80AA:5253:4CBB:09B4,
```