

Setup -->

Devices : Mobile(Android) and Computer(Linux)

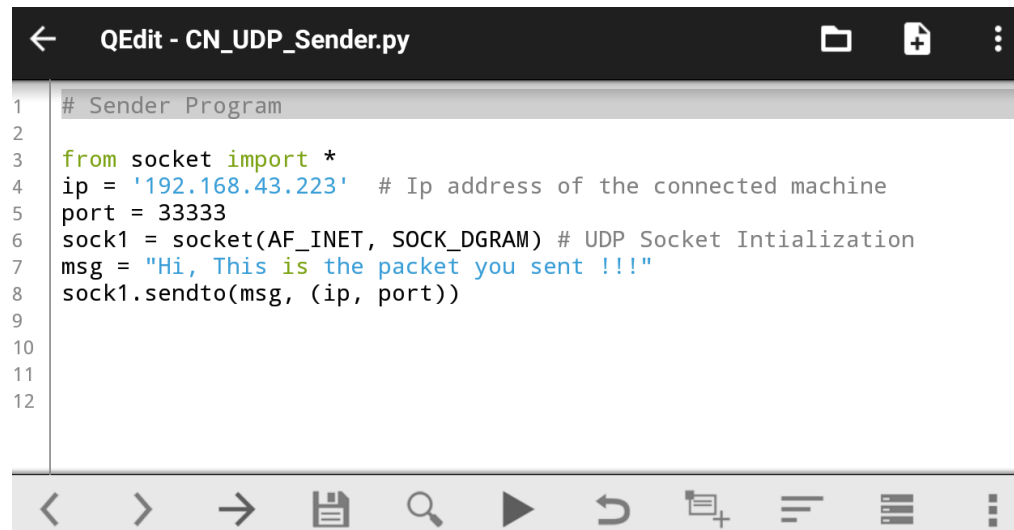
Device1 - Phone(Android)

Device2 - Computer(Linux)

Network : Mobile Hotspot and Tethering

Output -->

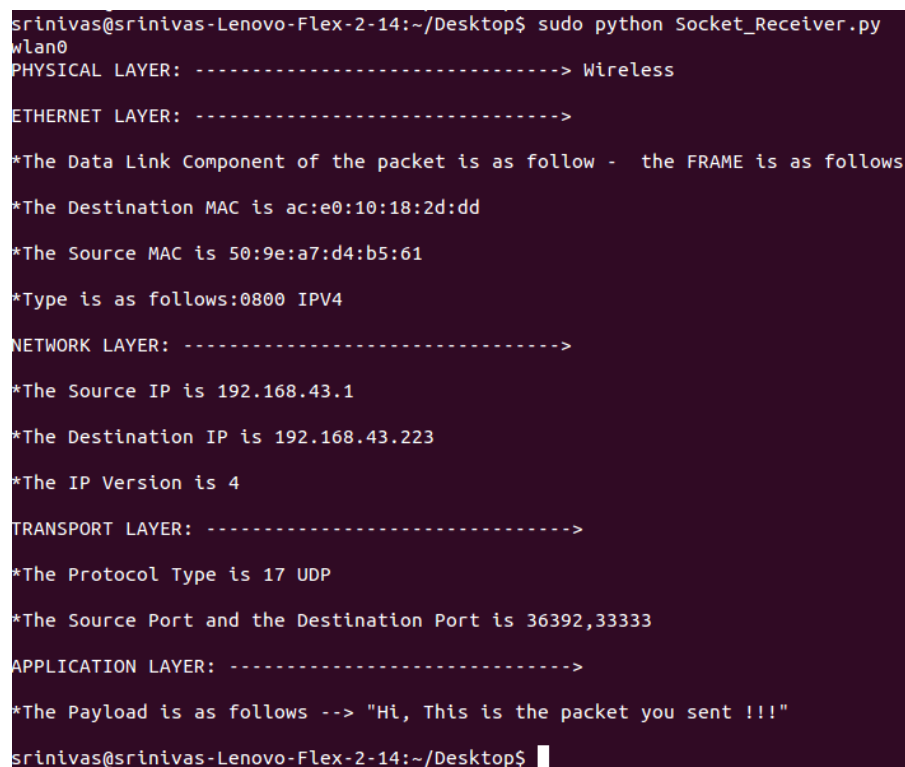
Device 1 - Phone - To send the UDP packet with a payload(any message) - Used QPython App



The screenshot shows the QPython Editor interface with a file named 'CN_UDP_Sender.py'. The code is as follows:

```
1 # Sender Program
2
3 from socket import *
4 ip = '192.168.43.223' # Ip address of the connected machine
5 port = 33333
6 sock1 = socket(AF_INET, SOCK_DGRAM) # UDP Socket Initialization
7 msg = "Hi, This is the packet you sent !!!"
8 sock1.sendto(msg, (ip, port))
9
10
11
12
```

Device 2 - Computer - To Receive the packet and decode to view the contents - Python 2.7



The screenshot shows a terminal window with the following output:

```
srinivas@srinivas-Lenovo-Flex-2-14:~/Desktop$ sudo python Socket_Receiver.py
wlan0
PHYSICAL LAYER: -----> Wireless

ETHERNET LAYER: ----->

*The Data Link Component of the packet is as follow - the FRAME is as follows
*The Destination MAC is ac:e0:10:18:2d:dd
*The Source MAC is 50:9e:a7:d4:b5:61
*Type is as follows:0800 IPV4

NETWORK LAYER: ----->

*The Source IP is 192.168.43.1
*The Destination IP is 192.168.43.223
*The IP Version is 4

TRANSPORT LAYER: ----->

*The Protocol Type is 17 UDP
*The Source Port and the Destination Port is 36392,33333

APPLICATION LAYER: ----->

*The Payload is as follows --> "Hi, This is the packet you sent !!!"
srinivas@srinivas-Lenovo-Flex-2-14:~/Desktop$
```