CN LAB ON ADDRESS RESOLUTION PROTOCOL

1. What is the 48-bit Ethernet address of your computer?

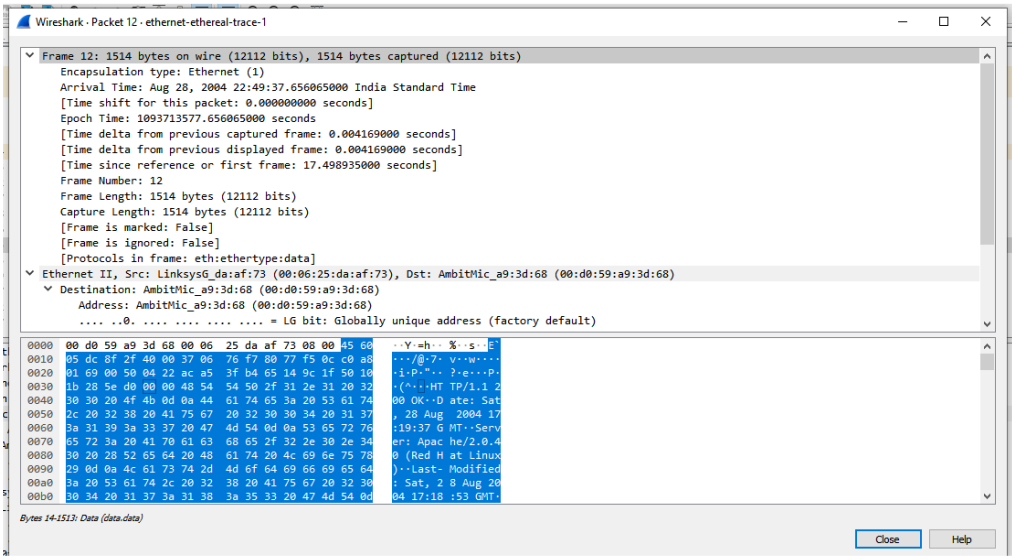
(00:d0:59:a9:3d:68)

2.What is the 48-bit destination address in the Ethernet frame? Is this the Ethernet address of gaia.cs.umass.edu? (Hint: the answer is no). What device has this as its Ethernet address?

(00:06:25:da:af:73)is not the Ethernet address of my destination . It is the address of my Linksys router, which is the link used to get off the subnet.

3. Give the hexadecimal value for the two-byte Frame type field. What upper layer protocol does this correspond to?
The hex value for the Frame type field is 0x0800.
4. How many bytes from the very start of the Ethernet frame does the ASCII “G” in “GET” appear in the Ethernet frame?

54 bytes



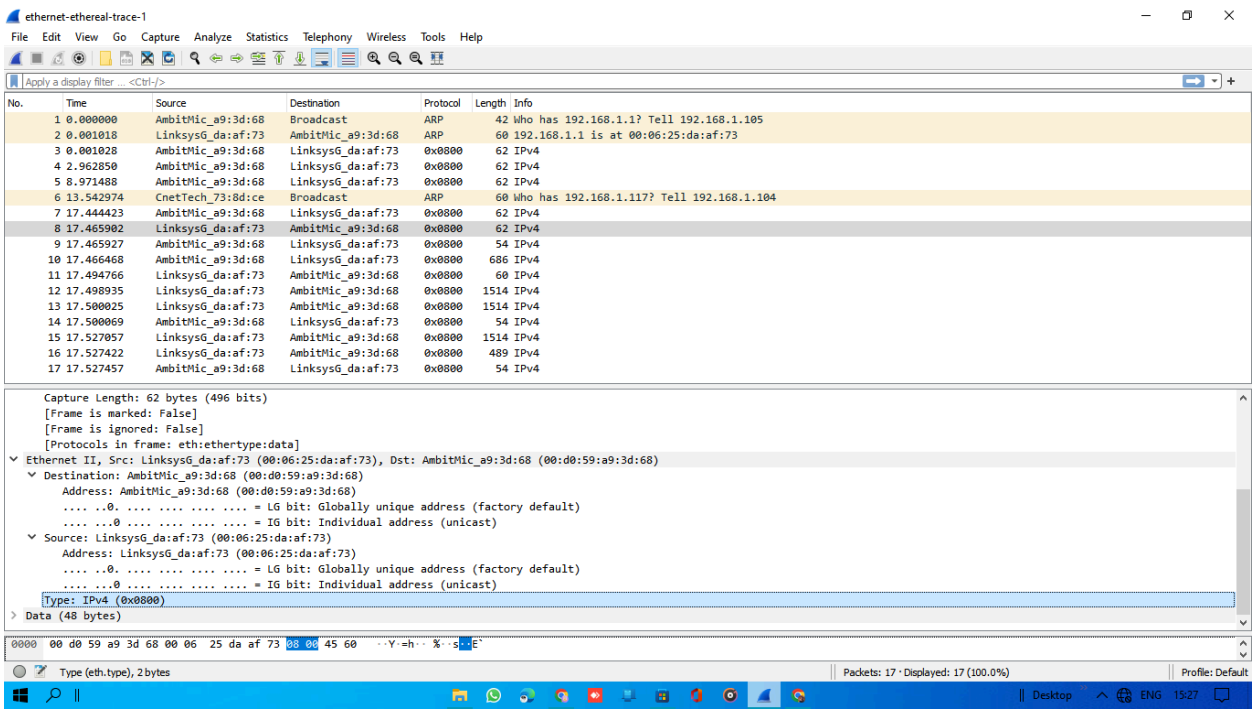
5. What is the value of the Ethernet source address? Is this the address of your computer, or of gaia.cs.umass.edu (Hint: the answer is no). What device has this as its Ethernet address?

(00:06:25:da:af:73)
it's not any of these address(source,destination) it is the address of my link sys router

6. What is the destination address in the Ethernet frame? Is this the Ethernet address of your computer?

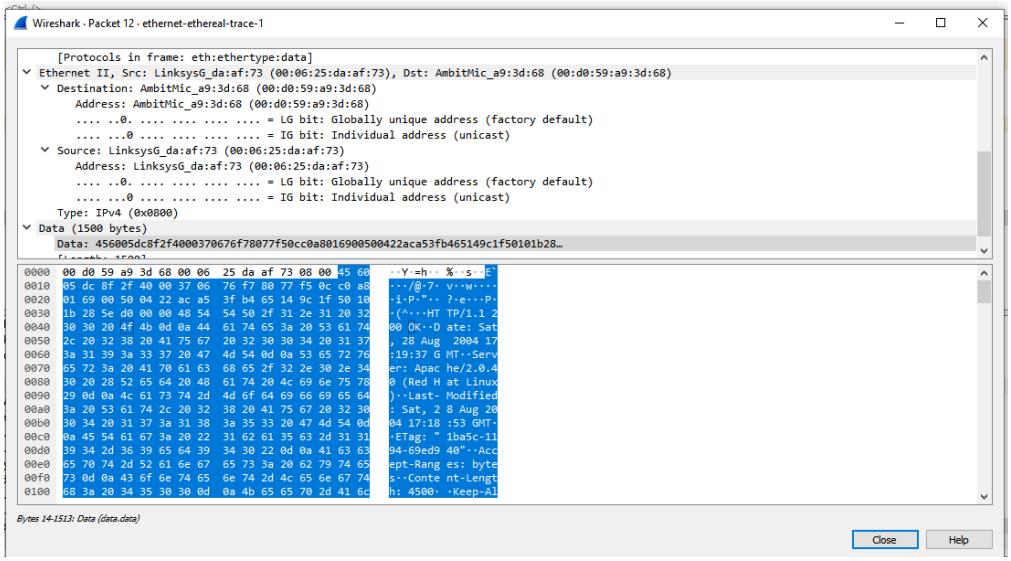
(00:d0:59:a9:3d:68) yes its my ethernet address of my computer

7. Give the hexadecimal value for the two-byte Frame type field. What upper layer protocol does this correspond to?
0X0800

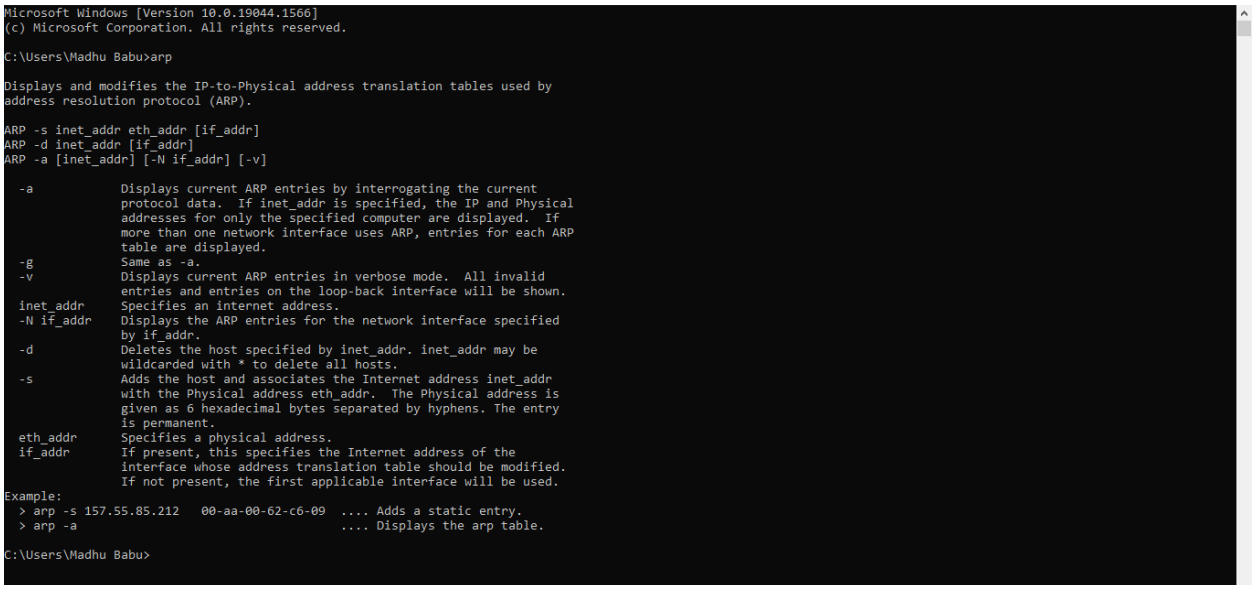


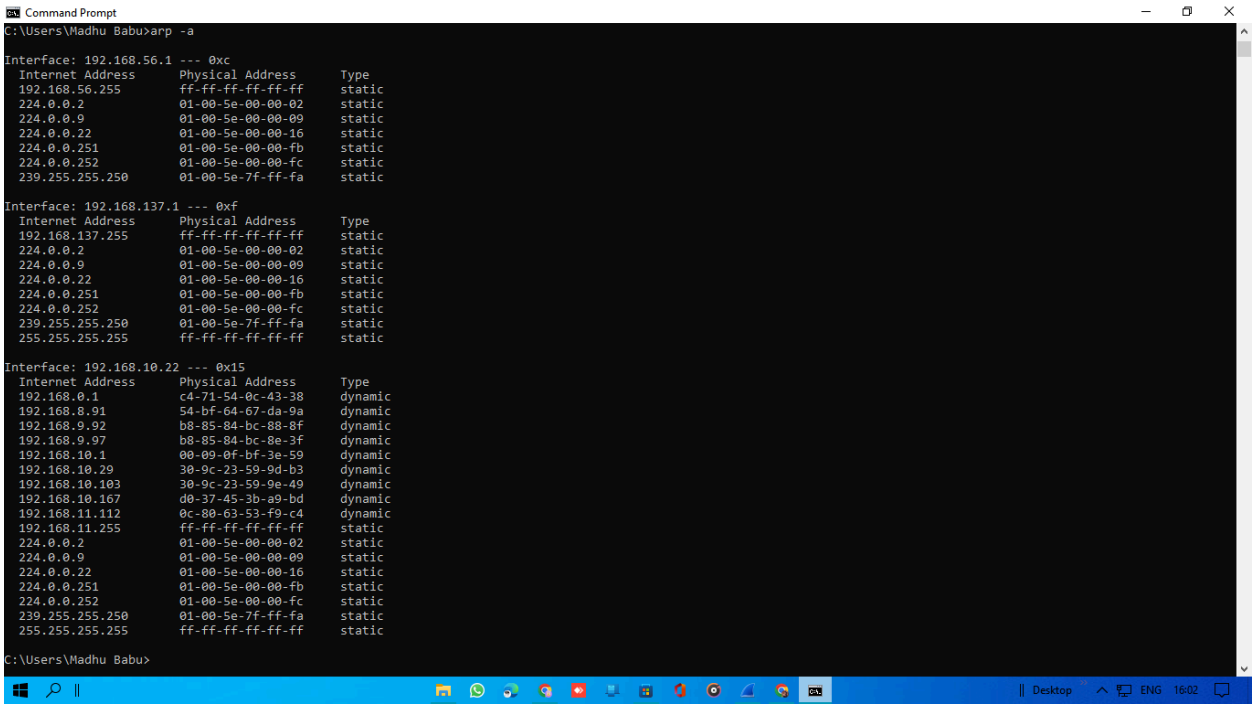
8. How many bytes from the very start of the Ethernet frame does the ASCII “O” in “OK” (i.e., the HTTP response code) appear in the Ethernet frame?

Ethernet frame does the ASCII “O” in “OK” (i.e., the HTTP response code) appear in the Ethernet frame is 54
(14 bytes ethernet header ,20 bytes IP header,20 bytes TCP header)=54bytes for ASCII “O” in OK



9. Write down the contents of your computer's ARP cache. What is the meaning of each column value?





My first column is internet address
Second column is physical address
Third column is type whether it is static or dynamic

10. What are the hexadecimal values for the source and destination addresses in the Ethernet frame containing the ARP request message?
  hexadecimal value is (00:d0:59:a9:3d:68) & (ff:ff:ff:ff:ff:ff)
11. Give the hexadecimal value for the two-byte Ethernet Frame type field. What upper layer protocol does this correspond to?