Assignment 5

Q1. Perform the ASN Lookup and find out the following (Please attach the screenshots) [1 + 1 + 1 + 2]

     a) Your ASN number

     b) The owner of the AS to which your system belongs to (Name of the organization / ISP)

     c) The range of IPV4 address space in your AS

     d) Find ASN number for the following domains -

          i)   IIITD (https://www.iiitd.ac.in/)

          ii)   IITB (http://www.iitb.ac.in/)

          iii) Google (https://www.google.com/)

          iv) Facebook (https://www.facebook.com/)

Q2. [2+1+2+3]

a) Capture one ARP request packet and ARP reply packet in wireshark. Show all the differences in those packets. [2]

b) What are operation codes of ARP request and ARP reply. [1]

c) With arp reply packet, after getting source and receiver MAC addresses, can you find the manufacturer? If yes please provide screenshots and explain this. [2]

d) Clear the arp cache using command utilities and insert three manual entries in arp cache. What is the difference between static and dynamic Type in arp table. [3]

Q3: [2+2+2]

Capture some arp packets in wireshark. Provide Screenshots.

a) Is the destination hardware address of the arp request packet is a real host? If not, who will receive the above packet. Include the filter to capture arp request arp reply in screenshots. [2]

b) Is the destination hardware address of the arp reply packet is a real host? If not, who will receive the above packet. Include the filter to capture arp reply in screenshots. [2]

c) What is the timeout of arp cache? Include the commands. [2]