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Network Training Programme

Module 5

Q1. Capture and analyze ARP packets using Wireshark. Inspect the ARP request and reply frames, and discuss the role of the sender's IP and MAC address in these packets.

The image shows a Wireshark packet capture window. The top menu bar includes File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, and Help. The packet list pane shows four captured packets, all of which are ARP requests. The packet details pane for the selected packet (No. 69) shows the following structure:

No.	Time	Source	Destination	Protocol	Length	Info
69	3.387158	aa:b3:de:f0:22:ca	Intel_e9:e0:ad	ARP	42	Who has 192.168.218.140? Tell 192.168.218.158
70	3.387200	Intel_e9:e0:ad	aa:b3:de:f0:22:ca	ARP	42	192.168.218.140 is at a4:b1:c1:e9:e0:ad
21340	30.643918	aa:b3:de:f0:22:ca	Intel_e9:e0:ad	ARP	42	Who has 192.168.218.140? Tell 192.168.218.158
21341	30.643945	Intel_e9:e0:ad	aa:b3:de:f0:22:ca	ARP	42	192.168.218.140 is at a4:b1:c1:e9:e0:ad

The packet details pane for the selected packet (No. 69) shows the following structure:

- > Frame 69: 42 bytes on wire (336 bits), 42 bytes captured (336 bits) on interface \Device\NPF\_{C4F94B32-8890-4DC6-BA00-C017B80203} [eth0]
- > Ethernet II, Src: aa:b3:de:f0:22:ca (aa:b3:de:f0:22:ca), Dst: Intel\_e9:e0:ad (a4:b1:c1:e9:e0:ad)
- > Address Resolution Protocol (request)

The packet bytes pane shows the raw data of the packet, with the first 12 bytes (0000 to 0020) highlighted:

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0000 a4 b1 c1 e9 e0 ad aa b3 de f0 22 ca 08 06 00 01 ..... ..
0010 08 00 06 04 00 01 aa b3 de f0 22 ca c0 a8 da 9e ..... ..
0020 00 00 00 00 00 00 c0 a8 da 8c ..... ..
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