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CSE 310 Programming Assignment3

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ARP Request:
Hardware Type:  1
Protocol Type:  2048
Hardware Size  6
Protocol Size:  4
Opcode  1
Sender MAC address:  08 : f1 : ea : 5e : 8d : 00
Sender IP Address:  172.25.80.3
Destination MAC address:  00 : 00 : 00 : 00 : 00 : 00
Destination IP Address:  172.25.84.109

ARP Response:
Hardware Type:  1
Protocol Type:  2048
Hardware Size  6
Protocol Size:  4
Opcode  2
Sender MAC address:  a4 : 83 : e7 : 47 : 46 : 50
Sender IP Address:  172.25.84.109
Destination MAC address:  08 : f1 : ea : 5e : 8d : 00
Destination IP Address:  172.25.80.3
```

bi) This is a screenshot showing one ARP packet exchange.

bii) By looking at the opcode, we can tell if it was an ARP response or an ARP request. If the packet has opcode 1 then it is an ARP request. If it has opcode 2 then that means the packet is an ARP response. Looking at the opcode and the sender/destination MAC address and IP address, we can see which is the IP address and MAC address of my router. Since the ARP request has opcode 1, my router is trying to make a request. The IP address of my router is 172.25.80.3. The MAC address of my router is 08: f1: ea: 5e: 8d: 00. The information is provided in the screenshot above.