# Answer sheet for Arp Lab Assignment

# Step 4: ARP request and reply

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| --- | --- |
| Request | Reply |
| Source MAC: f8:e4:fb:80:7e:cb | Source MAC: 74:e5:0b:28:5b:d0 |
| Destination MAC: 74:e5:0b:28:5b:d0 | Destination MAC: f8:e4:fb:80:7e:cb |
| Source IP: 192.168.1.4 | Source IP: 148.100.49.30 |
| Destination IP: 148.100.49.30 | Destination IP: 192.168.1.4 |

**Draw the Details of the ARP request and reply to resolve the default gateway**

There are several features to note:

* On the request, the target MAC is not known so it is usually filled in as 00:00:00:00:00:00.
* On the reply, the request target becomes the reply sender and vice versa.
* On the reply, the sender MAC returns the answer that is sought; it is highlighted.
* All of the fields that are shown are ARP header fields

# Step 4: Details of ARP over Ethernet

Answers to the questions:

1. The request opcode is 1 and the reply opcode is 2
2. The ARP header is 28 bytes for both the request and reply for IPv4.
3. The target MAC address of the request is normally all zeros, or 00:00:00:00:00:00.
4. The Ethernet Type value for ARP is 0x806.
5. The ARP reply is normally not broadcast. It is sent directly to the target using its Ethernet address.