Task B:

1. I can easily set the IP packet length. The struct IP includes an ip\_len field which stands for the total length.
2. When using a raw socket, I can use the function "setsockopt()" To tell the kernel that the given packet includes an IP header.

The given spoofer program is sniffing any ICMP packet by using pcap lib. If it’s an ICMP echo request, it will build an ICMP echo reply packet (including the IP header) and send it back to the address which sent the request (over raw socket).

In the attached pcap file you can see the connection between **ping** to google (the src IP is 10.9.0.5) and between the attacker (which identity as 8.8.8.8 but talks to 10.0.2.15).

Task C: