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Lab 7

Lab Report: This lab was pretty straight forward. Once again, it was neat to see the internal workings of these protocols. I completed this lab 100% independently without help from outside resources.

- 1) 192.168.95.64
- 2) Header Value: 5
- 3) 20 bytes are in the header, 36 bytes are in the payload, $56 - 20$ (Total bytes – Header bytes)
- 4) No, the more fragments is not set
- 5) the checksum and identification fields
- 6) The fragment offset, time to live, total length all stay constant. Time to live and total length are the only ones that has to stay constant. Fragment offset can vary from protocol to protocol.
- 7) The number/string increments by one each time.
- 8) Identification: 0x6904 TTL: 63
- 9) No, the identification value changes for each protocol.
- 10) Yes
- 11) The flags column indicates the more fragments is set. The fragment offset is 0. The length of the datagram: 1500
- 12) The fragment offset is 1480. Yes, since the more fragments is still set.

- 13) The IP header fields that changed between the fragments are: total length, flags, fragment offset, and checksum.
- 14) There are 3 fragments created from the original datagram.
- 15) The IP header fields that changed between all of the packets are: fragment offset, and checksum. We see a change in total length, and also in the flags. The first two packets have a total length of 1500, with the more fragments bit set to 1, and the last packet has a total length of 540, with the more fragments bit set to 0.