# Lab 1 – CS 3516

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1. List 3 different protocols that appear in the protocol column in the unfiltered packet-listing window in step 7 above.

Protocols include: DNS, TCP and HTTP (and others)

2. How long did it take from when the HTTP GET message was sent until the HTTP OK reply was received?

The GET message was sent at:    8:46:43.900762
The OK reply was received at:    8:46:44.050924

Hence the time it took is:          0.150162 seconds

3. What is the Internet address of the gaia.cs.umass.edu (also known as wwwnet.cs.umass.edu)? What is the Internet address of your computer?

The IP address of my device inside my home network was:   192.168.2.174
The IP address of gaia.cs.umass.edu is:               128.119.245.12

4. Print the two HTTP messages (GET and OK) referred to in question 2 above.

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No.    Time            Source            Destination        Protocol Length Info
     134 08:46:43.900762  192.168.2.174     128.119.245.12     HTTP      520   GET /wireshark-labs/INTRO-wireshark-file1.html HTTP/1.1
Frame 134: 520 bytes on wire (4160 bits), 520 bytes captured (4160 bits) on interface \Device\NPF_{5A705ED7-98BA-4C5B-A095-BC93C33891DE}, id 0
Ethernet II, Src: IntelCor_b3:a4:c0 (30:3a:64:b3:a4:c0), Dst: ZyxelCom_7c:b0:b0 (e4:18:6b:7c:b0:b0)
Internet Protocol Version 4, Src: 192.168.2.174, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 51113, Dst Port: 80, Seq: 1, Ack: 1, Len: 466
Hypertext Transfer Protocol
    GET /wireshark-labs/INTRO-wireshark-file1.html HTTP/1.1\r\n
    Host: gaia.cs.umass.edu\r\n
    Connection: keep-alive\r\n
    Upgrade-Insecure-Requests: 1\r\n
    User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/84.0.4147.135 Safari/537.36\r\n
    Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9\r\n
    Accept-Encoding: gzip, deflate\r\n
    Accept-Language: en-US,en;q=0.9\r\n
    \r\n
    [Full request URI: http://gaia.cs.umass.edu/wireshark-labs/INTRO-wireshark-file1.html]
    [HTTP request 1/2]
    [Response in frame: 140]
    [Next request in frame: 142]
No.    Time            Source            Destination        Protocol Length Info
     140 08:46:44.050924  128.119.245.12    192.168.2.174      HTTP      491   HTTP/1.1 200 OK  (text/html)
Frame 140: 491 bytes on wire (3928 bits), 491 bytes captured (3928 bits) on interface \Device\NPF_{5A705ED7-98BA-4C5B-A095-BC93C33891DE}, id 0
Ethernet II, Src: ZyxelCom_7c:b0:b0 (e4:18:6b:7c:b0:b0), Dst: IntelCor_b3:a4:c0 (30:3a:64:b3:a4:c0)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.2.174
Transmission Control Protocol, Src Port: 80, Dst Port: 51113, Seq: 1, Ack: 467, Len: 437
Hypertext Transfer Protocol
    HTTP/1.1 200 OK\r\n
    Date: Thu, 03 Sep 2020 06:46:42 GMT\r\n
    Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.9 mod_perl/2.0.11 Perl/v5.16.3\r\n
    Last-Modified: Thu, 03 Sep 2020 05:59:01 GMT\r\n
    ETag: "51-5ae6272e89698"\r\n
    Accept-Ranges: bytes\r\n
    Content-Length: 81\r\n
    Keep-Alive: timeout=5, max=100\r\n
    Connection: Keep-Alive\r\n
    Content-Type: text/html; charset=UTF-8\r\n
    \r\n
    [HTTP response 1/2]
    [Time since request: 0.150162000 seconds]
    [Request in frame: 134]
    [Next request in frame: 142]
    [Next response in frame: 146]
    [Request URI: http://gaia.cs.umass.edu/wireshark-labs/INTRO-wireshark-file1.html]
    File Data: 81 bytes
Line-based text data: text/html (3 lines)
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