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

HTTP, DNS, TCP

2. How long did it take from when the HTTP GET message was sent until the HTTP OK reply was received? (By default, the value of the Time column in the packetlisting window is the amount of time, in seconds, since Wireshark tracing began. To display the Time field in time-of-day format, select the Wireshark View pull down menu, then select Time Display Format, then select Time-of-day.)

0.019401 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?

gaia.cs.umass.edu : 128.119.245.12
My computer: 192.168.1.20

4. 4. Print the two HTTP messages (GET and OK) referred to in question 2 above. To do so, select Print from the Wireshark File command menu, and select the "Selected Packet Only" and "Print as displayed" radial buttons, and then click OK.

GET MESSAGE:

```
    557 49.399674      192.168.1.20          128.119.245.12        HTTP     714    GET /wireshark-
labs/INTRO-wireshark-file1.html HTTP/1.1
Frame 557: 714 bytes on wire (5712 bits), 714 bytes captured (5712 bits) on interface 0
Ethernet II, Src: Apple_10:41:06 (80:e6:50:10:41:06), Dst: AsustekC_3f:50:60 (74:d0:2b:3f:50:60)
Internet Protocol Version 4, Src: 192.168.1.20, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 53481, Dst Port: 80, Seq: 649, Ack: 240, Len: 648
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
    Cache-Control: max-age=0\r\n
    User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_13_2) AppleWebKit/537.36 (KHTML, like
Gecko) Chrome/63.0.3239.84 Safari/537.36\r\n
    Upgrade-Insecure-Requests: 1\r\n
    Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,image/apng,*/
*;q=0.8\r\n
    DNT: 1\r\n
    Accept-Encoding: gzip, deflate\r\n
    Accept-Language: en-US,en;q=0.9\r\n
    Cookie: __unam=9514ce4-1613a14b9fc-6188086c-8;
SESSIONID=MODULE=e14e5c37105248b1d3a7165/1cea0e/9\r\n
    If-None-Match: "51-563f8e5cbcce4"\r\n
    If-Modified-Since: Tue, 30 Jan 2018 06:59:01 GMT\r\n
    \r\n
    [Full request URI: http://gaia.cs.umass.edu/wireshark-labs/INTRO-wireshark-file1.html]
    [HTTP request 2/2]
    [Prev request in frame: 500]
    [Response in frame: 558]
```

OK RESPONSE:

```
    558 49.419875      128.119.245.12        192.168.1.20          HTTP     304    HTTP/1.1 304
Not Modified
Frame 558: 304 bytes on wire (2432 bits), 304 bytes captured (2432 bits) on interface 0
Ethernet II, Src: AsustekC_3f:00:60 (74:d0:2b:3f:00:60), Dst: Apple_10:41:06 (80:c6:50:10:41:06)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.1.20
Transmission Control Protocol, Src Port: 80, Dst Port: 53481, Seq: 240, Ack: 1297, Len: 238
Hypertext Transfer Protocol
    HTTP/1.1 304 Not Modified\r\n
    Date: Tue, 30 Jan 2018 16:34:23 GMT\r\n
    Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/5.4.16 mod_perl/2.0.10 Perl/v5.16.3\r\n
    Connection: Keep-Alive\r\n
    Keep-Alive: timeout=5, max=99\r\n
    ETag: "51-563f8e5cbcce4"\r\n
    \r\n
    [HTTP response 2/2]
    [Time since request: 0.019401000 seconds]
    [Prev request in frame: 500]
    [Prev response in frame: 502]
    [Request in frame: 557]
```