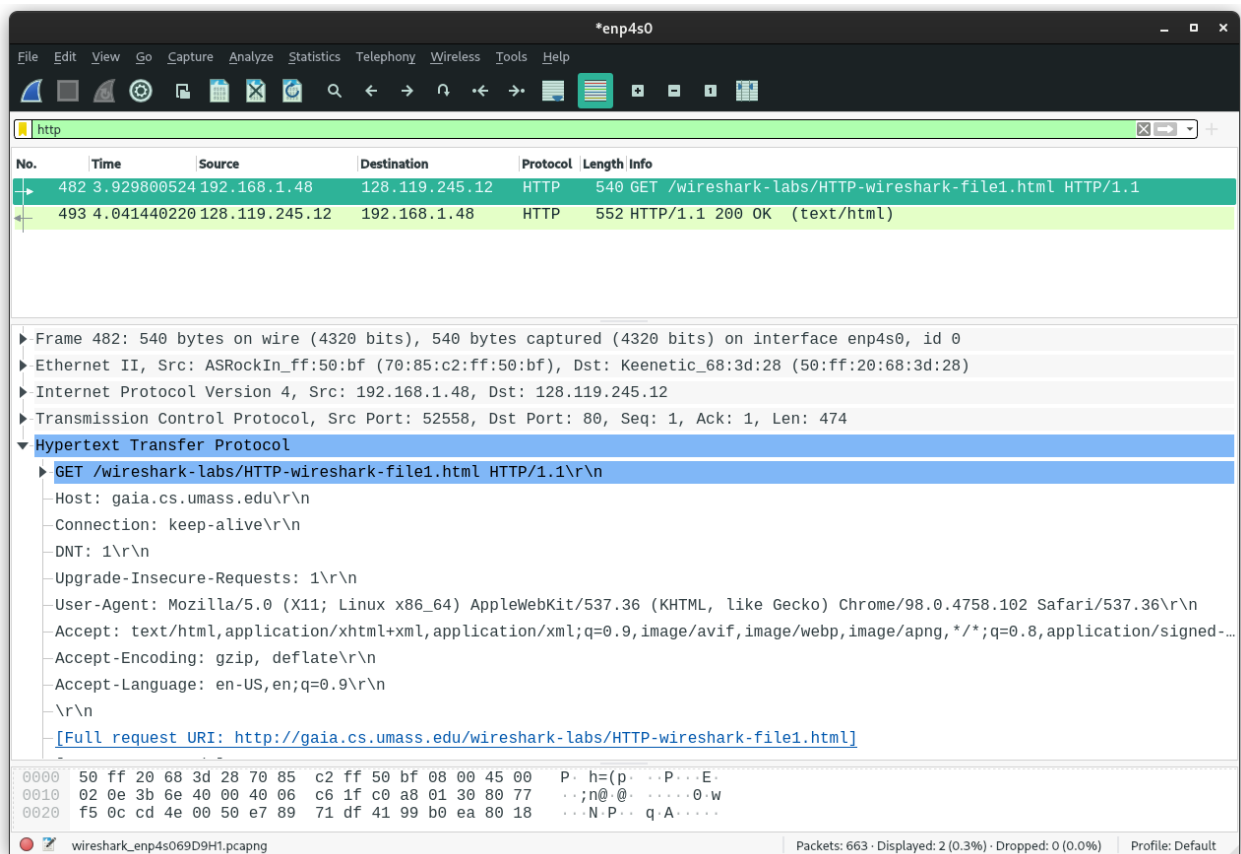


Задание 1.

- 1) Да, использует.
- 2) Accept-Language: en-US,en;q=0.9\r\n. Английский. Какие принимаются типы файлов и энкодинг.
- 3) Мой: 192.168.1.48, сервер: 129.119.245.12
- 4) 200 OK
- 5) Sat, 26 Feb 2022 06:59:01 GMT.
- 6) 128



Задание 2.

- 1) Нет.
- 2) Лежит в Line-based text data: text/html (10 lines).
- 3) If-Modified-Since: Sat, 26 Feb 2022 06:59:01 GMT
- 4) 304, не вернул

The image shows a Wireshark packet capture window titled '*enp4s0'. The packet list on the left shows four packets. The selected packet is packet 54, an HTTP 200 OK response from 128.119.245.12 to 192.168.1.48. The packet details pane on the right shows the 'Line-based text data: text/html (10 lines)' section expanded, displaying the following HTML content:

```
\n<html>\n\nCongratulations again! Now you've downloaded the file lab2-2.html. <br>\nThis file's last modification date will not change. <p>\nThus if you download this multiple times on your browser, a complete copy <br>\nwill only be sent once by the server due to the inclusion of the IN-MODIFIED-SINCE<br>\nfield in your browser's HTTP GET request to the server.\n\n
```

The packet bytes pane at the bottom shows the raw data in hexadecimal and ASCII. The ASCII column displays the HTML content: '<html>\n\nCongratulations again! Now you've downloaded the file lab2-2.html.
\nThis file's last modification date will not change. <p>\nThus if you download this multiple times on your browser, a complete copy
\nwill only be sent once by the server due to the inclusion of the IN-MODIFIED-SINCE
\nfield in your browser's HTTP GET request to the server.\n\n'. The status bar at the bottom indicates 'Packets: 356 · Displayed: 4 (1.1%) · Dropped: 0 (0.0%) · Profile: Default'.

Задание 3.

- 1) Один. 50
- 2) 60
- 3) 4
- 4) Нет

The image shows a Wireshark packet capture window titled '*enp4s0'. The packet list pane shows two packets. Packet 50 is a GET request from 192.168.1.48 to 128.119.245.12. Packet 60 is the corresponding 200 OK response from 128.119.245.12 to 192.168.1.48. The packet details pane for packet 60 is expanded, showing the HTTP response structure. The status bar at the bottom indicates that the frame is 583 bytes, reassembled TCP is 4861 bytes, and the protocol is Hypertext Transfer Protocol (http), 361 bytes. The status bar also shows 'Packets: 298 · Displayed: 2 (0.7%) · Dropped: 0 (0.0%)' and 'Profile: Default'.

No.	Time	Source	Destination	Protocol	Length	Info
50	3.682296...	192.168.1.48	128.119.245.12	HTTP	540	GET /wireshark-labs/HTTP-wireshark-file3.html HTTP/1...
60	3.796658...	128.119.245.12	192.168.1.48	HTTP	583	HTTP/1.1 200 OK (text/html)

► HTTP/1.1 200 OK\r\n

- Date: Sat, 26 Feb 2022 18:18:44 GMT\r\n
- Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.27 mod_perl/2.0.11 Perl/v5.16.3\r\n
- Last-Modified: Sat, 26 Feb 2022 06:59:01 GMT\r\n
- ETag: "1194-5d8e659a73ac5"\r\n
- Accept-Ranges: bytes\r\n
- Content-Length: 4500\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 1/1]
- [Time since request: 0.114361541 seconds]
- [Request in frame: 50]
- [Request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file3.html]
- File Data: 4500 bytes

► Line-based text data: text/html (98 lines)

0000	48 54 54 50 2f 31 2e 31 20 32 30 30 20 4f 4b 0d	HTTP/1.1 200 OK
0010	0a 44 61 74 65 3a 20 53 61 74 2c 20 32 36 20 46	Date: S at, 26 F

Frame (583 bytes) Reassembled TCP (4861 bytes)

Hypertext Transfer Protocol (http), 361 bytes

Packets: 298 · Displayed: 2 (0.7%) · Dropped: 0 (0.0%) Profile: Default

Задание 4.

- 1) 3. 128.119.245.12 и 178.79.137.164
- 2) Последовательно, потому что время отправки второго GET после получения пакета с первой картинкой

The image shows a Wireshark packet capture window titled '*enp4s0'. The packet list on the left shows several HTTP packets. The selected packet is packet 119, which is an HTTP GET request from 192.168.1.48 to 128.119.245.12. The packet details pane on the right shows the structure of the packet, including the Ethernet II header, Internet Protocol Version 4 header, Transmission Control Protocol header, and the Hypertext Transfer Protocol section. The Hypertext Transfer Protocol section shows the GET request for the file /wireshark-labs/HTTP-wireshark-file4.html. The packet bytes pane at the bottom shows the raw data of the packet.

No.	Time	Source	Destination	Protocol	Length	Info
119	3.464746...	192.168.1.48	128.119.245.12	HTTP	540	GET /wireshark-labs/HTTP-wireshark-file4.html HTTP/1.1
125	3.577462...	128.119.245.12	192.168.1.48	HTTP	13...	HTTP/1.1 200 OK (text/html)
130	3.590742...	192.168.1.48	128.119.245.12	HTTP	486	GET /pearson.png HTTP/1.1
137	3.703361...	128.119.245.12	192.168.1.48	HTTP	22...	HTTP/1.1 200 OK (PNG)
156	3.799085...	192.168.1.48	178.79.137.164	HTTP	453	GET /8E_cover_small.jpg HTTP/1.1
167	3.839392...	178.79.137.164	192.168.1.48	HTTP	237	HTTP/1.1 301 Moved Permanently

Frame 119: 540 bytes on wire (4320 bits), 540 bytes captured (4320 bits) on interface enp4s0, id 0

Ethernet II, Src: ASRockIn_ff:50:bf (70:85:c2:ff:50:bf), Dst: Keenetic_68:3d:28 (50:ff:20:68:3d:28)

Internet Protocol Version 4, Src: 192.168.1.48, Dst: 128.119.245.12

Transmission Control Protocol, Src Port: 52762, Dst Port: 80, Seq: 1, Ack: 1, Len: 474

Hypertext Transfer Protocol

GET /wireshark-labs/HTTP-wireshark-file4.html HTTP/1.1\r\n

Host: gaia.cs.umass.edu\r\n

Connection: keep-alive\r\n

DNT: 1\r\n

Upgrade-Insecure-Requests: 1\r\n

User-Agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/98.0.4758.102 S\r\n

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,\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/HTTP-wireshark-file4.html>]

[HTTP request 1/2]

0000 50 ff 20 68 3d 28 70 85 c2 ff 50 bf 08 00 45 00 P h=(p...P...E

0010 02 0e 4d e0 40 00 40 06 b3 ad c0 a8 01 30 80 77 ..M.@...@...w

0020 f5 0c ce 1a 00 50 19 55 ad 46 1e b8 70 78 80 18P.U.F..pX..

wireshark_enp4s0G254H1.pcapng Packets: 965 · Displayed: 6 (0.6%) · Dropped: 0 (0.0%) Profile: Default

Задание 5.

- 1) 401 Unauthorized
- 2) Authorization

The image shows a Wireshark packet capture on interface enp4s0. The packet list shows several HTTP packets. Packet 369 is a GET request to /wireshark-labs/protected_pages/HTTP-wires... which receives a 401 Unauthorized response (packet 372). Packet 534 is a GET request to /check_network_status.txt which receives a 200 OK response (packet 536). Packet 600 is another GET request to /wireshark-labs/protected_pages/HTTP-wires... The packet details pane for packet 600 shows the Hypertext Transfer Protocol section expanded, displaying a GET request with various headers including Host, Connection, Cache-Control, Authorization (Basic d2lyZXNoYXJrLXN0dWRlbnRzOm5ldHdyb2s=), DNT, Upgrade-Insecure-Requests, User-Agent, Accept, Accept-Encoding, and Accept-Language. The packet bytes pane at the bottom shows the raw data in hexadecimal and ASCII.

No.	Time	Source	Destination	Protocol	Length	Info
23	1.906746...	192.168.1.48	128.119.245.12	HTTP	556	GET /wireshark-labs/protected_pages/HTTP-wires...
30	2.020412...	128.119.245.12	192.168.1.48	HTTP	783	HTTP/1.1 401 Unauthorized (text/html)
369	20.62950...	192.168.1.48	128.119.245.12	HTTP	641	GET /wireshark-labs/protected_pages/HTTP-wires...
372	20.74570...	128.119.245.12	192.168.1.48	HTTP	783	HTTP/1.1 401 Unauthorized (text/html)
534	33.24837...	192.168.1.48	116.203.91.91	HTTP	164	GET /check_network_status.txt HTTP/1.1
536	33.29389...	116.203.91.91	192.168.1.48	HTTP	285	HTTP/1.1 200 OK (text/plain)
600	37.06969...	192.168.1.48	128.119.245.12	HTTP	641	GET /wireshark-labs/protected_pages/HTTP-wires...

Frame 369: 641 bytes on wire (5128 bits), 641 bytes captured (5128 bits) on interface enp4s0, id 0

- Ethernet II, Src: ASRockIn_ff:50:bf (70:85:c2:ff:50:bf), Dst: Keenetic_68:3d:28 (50:ff:20:68:3d:28)
- Internet Protocol Version 4, Src: 192.168.1.48, Dst: 128.119.245.12
- Transmission Control Protocol, Src Port: 52820, Dst Port: 80, Seq: 1, Ack: 1, Len: 575
- Hypertext Transfer Protocol
 - GET /wireshark-labs/protected_pages/HTTP-wireshark-file5.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
 - Authorization: Basic d2lyZXNoYXJrLXN0dWRlbnRzOm5ldHdyb2s=\r\n
 - DNT: 1\r\n
 - Upgrade-Insecure-Requests: 1\r\n
 - User-Agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/98.0.4758.102 S
 - Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,
 - Accept-Encoding: gzip, deflate\r\n
 - Accept-Language: en-US,en;q=0.9\r\n
 - \r\n

0000 50 ff 20 68 3d 28 70 85 c2 ff 50 bf 08 00 45 00 P h=(p . . . P . . . E .
0010 02 73 18 e4 40 00 40 06 e8 44 c0 a8 01 30 80 77 . s . . @ . @ . . D . . . 0 . w
0020 f5 0c ce 54 00 50 3f 0e ee eb 28 fb 4b 9d 80 18 . . . T . P ? . . . (. K . . .

wireshark_enp4s040AUH1.pcapng Packets: 689 · Displayed: 8 (1.2%) · Dropped: 0 (0.0%) Profile: Default