Lab 2 Web Joshua Beaulieu

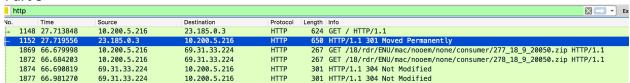
Part 1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
b	а	а	а	b	b	d	b	С	b	d	а	С	b	a

Part 2

(Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
k	C	а	а	b	а	b	а	b	а	b	а	а	а	b	а

Part 3



```
V Transmission Control Protocol, Src Port: 80, Dst Port: 59155, Seq: 1, Ack: 559, Len: 584

Source Port: 80

Destination Port: 59155
[Stream index: 73]
[TCP Segment Len: 584]

Sequence number: 1 (relative sequence number)
[Next sequence number: 585 (relative sequence number)
Acknowledgment number: 559 (relative ack number)
1000 .... | Header Length: 32 bytes (8)

** Flags: 0*8018 (PSH, ACK)

0000 .... | Reserved: Not set

... | Nonce: Not Set | Nonce: N
```

```
Transmission Control Protocol, Src Port: 80, Dst Port: 65359, Seq: 1, Ack: 505, Len: 585
▼ Hypertext Transfer Protocol
  ▼ HTTP/1.1 301 Moved Permanently\r\n
     ▼ [Expert Info (Chat/Sequence): HTTP/1.1 301 Moved Permanently\r\n]
          [HTTP/1.1 301 Moved Permanently\r\n]
          [Severity level: Chat]
          [Group: Sequence]
       Request Version: HTTP/1.1
       Status Code: 301
       [Status Code Description: Moved Permanently]
       Response Phrase: Moved Permanently
    Content-Type: text/html; charset=UTF-8\r\n
    Location: https://wit.edu/\r\n
    Server: nginx\r\n
    Surrogate-Key-Raw:\r\n
    X-Pantheon-Styx-Hostname: styx-fe3-a-4173214628-c9txx\r\n
    X-Styx-Req-Id: styx-fdcaeb2ae746cba20ea8117d085e57d3\r\n
    Cache-Control: public, max-age=86400\r\n
    Via: 1.1 varnish\r\n
  ▶ Content-Length: 0\r\n
    Accept-Ranges: bytes\r\n
      0d 0a 43 6f 6e 74 65 6e
                               74 2d 54 79 70 65 3a 20
6c 3b 20 63 68 61 72 73
0060
                                                          ..Conten t-Type:
0070
         65 78 74 2f 68 74 6d
                                                          text/htm l; chars
0080
     65 74 3d 55 54 46 2d 38
                               0d 0a 4c 6f 63 61 74 69
                                                          et=UTF-8 ..Locati
0090
         6e 3a 20 68 74 74 70
                               73
                                  3a 2f 2f 77 69
                                                  74 2e
                                                          on: http s://wit.
00a0
     65 64 75 2f 0d 0a 53 65
                               72 76 65 72 3a 20 6e 67
                                                          edu/..Se rver: ng
     69 6e 78 0d 0a 53 75 72
00b0
                               72 6f 67 61 74 65 2d 4b
                                                          inx..Sur rogate-K
     65 79 2d 52 61 77 3a 0d
00c0
                               0a 58 2d 50 61 6e 74 68
                                                          ey-Raw:. .X-Panth
```

This HTTP packet Moved Permanently means when you go to wit.edu it redirects you to a new permanent URL. It makes you go to another location when you try to go to wit.edu so you end up at the new location.

No.: 24 · Time: 2.440069 · Source: 23.185.0.3 · Destination: 10.200.5.216 · Protocol: HTTP · Length: 651 · Info: HTTP/1.1 301 Moved Permanently

```
69.31.33.224
69.31.33.224
                                                                                                                                  301 HTTP/1.1 304 Not Modified 301 HTTP/1.1 304 Not Modified
     1877 66.981270
                                                                            10.200.5.216
        [Stream index: 84]
         [TCP Segment Len: 235]
        Sequence number: 1 (relative sequence number)
        [Next sequence number: 236
                                                             (relative sequence number)]
        Acknowledgment number: 202
                                                             (relative ack number)
        1000 .... = Header Length: 32 bytes (8)
    ▼ Flags: 0x018 (PSH, ACK)
            000. .... = Reserved: Not set
            ...0 .... = Nonce: Not set
            .... 0... = Congestion Window Reduced (CWR): Not set
            .... .0.. .... = ECN-Echo: Not set
             .... ..0. .... = Urgent: Not set
                                                                                                  0020 05 d8 00 50 e7 1b 43 71 bb b1 4c 0d 8e c2 80 18
         03 ab c7 ec 00 00 01 01 08 0a 1f 45 be 65 1e 9f
84 a5 48 54 54 50 2f 31 2e 31 20 33 30 34 20 4e
        64 43 46 34 34 34 34 36 21 31
66 74 20 4d 6f 64 69 66
74 65 6e 74 2d 54 79 70
63 61 74 69 6f 6e 2f 7a
2d 4d 6f 64 69 66 69 65
32 39 20 4e 6f 76 20 32
                                                    26 51 260 53 80 54 20 46
69 65 64 0d 0a 43 6f 6e
65 3a 20 61 70 70 6c 69
69 70 0d 0a 4c 61 73 74
64 3a 20 57 65 64 2c 20
30 31 37 20 30 36 3a 32
0070
         32 39 20 46 61 76 20 32
35 3a 35 30 20 47 4d 54
43 6f 6e 74 72 6f 6c 3a
3d 36 30 35 0d 0a 45 78
68 75 2c 20 32 35 20 4a
31 36 3a 31 34 3a 31 36
                                                    30 31 37 20 30 36 33 32
00 04 03 61 63 68 65 2d
20 6d 61 78 2d 61 67 65
70 69 72 65 73 3a 20 54
61 6e 20 32 30 31 38 20
20 47 4d 54 0d 0a 44 61
                                                                                                   =605..Ex pires: T
hu, 25 J an 2018
16:14:16 GMT..Da
aaca
         74 65 3a 20 54 68 75 2c
32 30 31 38 20 31 36 3a
                                                     20 32 35 20 4a 61 6e 20
30 34 3a 31 31 20 47 4d
                                                                                                   te: Thu, 25 Jan
2018 16: 04:11 GM
                                                                                                                                                                                             Packets: 2170 · Displayed: 6 (0.3%)
```

```
Transmission Control Protocol, Src Port: 65359, Dst Port: 80, Seq: 1, Ack: 1, Len: 504
  ▼ Hypertext Transfer Protocol
         ▼ GET / HTTP/1.1\r\n
                    [Expert Info (Chat/Sequence): GET / HTTP/1.1\r\n]
                             [GET / HTTP/1.1\r\n]
                             [Severity level: Chat]
                             [Group: Sequence]
                     Request Method: GET
                      Request URI: /
                      Request Version: HTTP/1.1
               Host: www.wit.edu\r\n
               Connection: keep-alive\r\n
               User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_12_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/63.0.3239.132
               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=0.9, image/webp, image/webp, image/apng, */*; q=0.8 \\ \ r\ n=0.9, image/webp, image/we
               Accept-Encoding: gzip, deflate\r\n
               Accept-Language: en-US,en;q=0.9\r\n
         ▼ Cookie: _ga=GA1.2.2060301027.1490312034; nmstat=1511995854465; _gid=GA1.2.191447913.1516895869; _uetsid=_uet6a456ba0\r\
                      Cookie pair: _ga=GA1.2.2060301027.1490312034
                      Cookie pair: nmstat=1511995854465
                      Cookie pair: _gid=GA1.2.191447913.1516895869
                      Cookie pair: _uetsid=_uet6a456ba0
  0040 10 23 47 45 54 20 2f 20 48 54 54 50 2f 31 2e 31
                                                                                                                                                         .#GFT / HTTP/1.1
 0050 0d 0a 48 6f 73 74 3a 20 77 77 77 2e 77 69 74 2e 0060 65 64 75 0d 0a 43 6f 6e 6e 65 63 74 69 6f 6e 3a 0070 20 6b 65 65 70 2d 61 6c 69 76 65 0d 0a 55 73 65
                                                                                                                                                          ..Host: www.wit.
                                                                                                                                                         edu..Con nection:
                                                                                                                                                          keep-al ive..Use
  0080 72 2d 41 67 65 6e 74 3a 20 4d 6f 7a 69 6c 6c 61
                                                                                                                                                        r-Agent: Mozilla
No.: 22 · Time: 2.435014 · Source: 10.200.5.216 · Destination: 23.185.0.3 · Protocol: HTTP · Length: 570 · Info: GET / HTTP/1.1
```

This HTTP packet returns to the client if the cached copy file is up to date with the server. The client performed a get request and the access was allowed but the document was not modified so the request is terminated by the empty header.