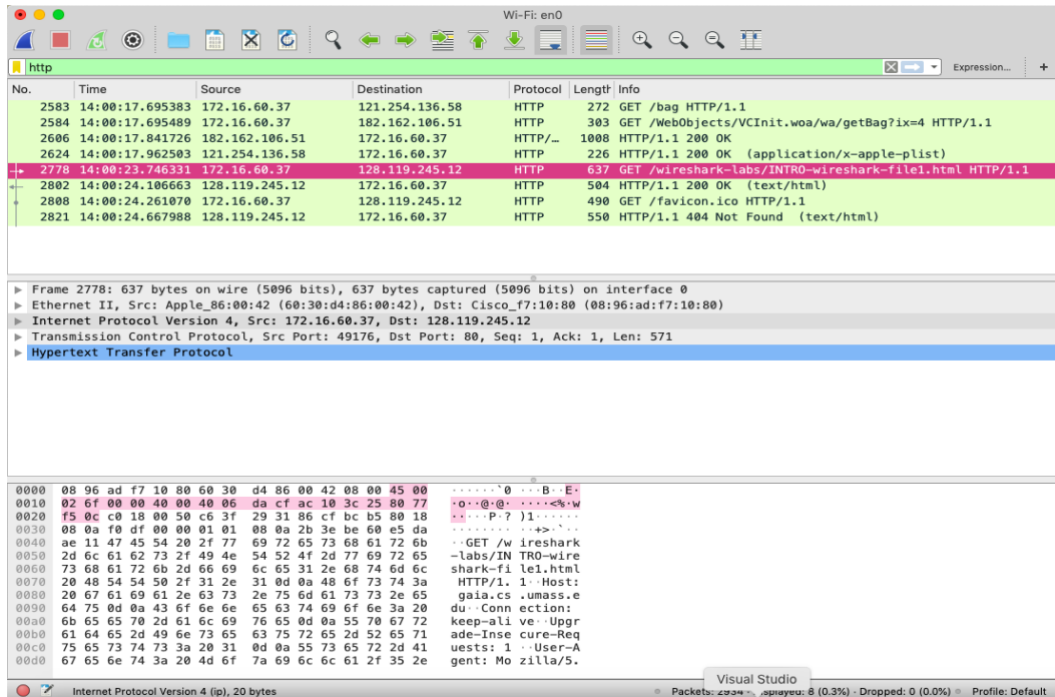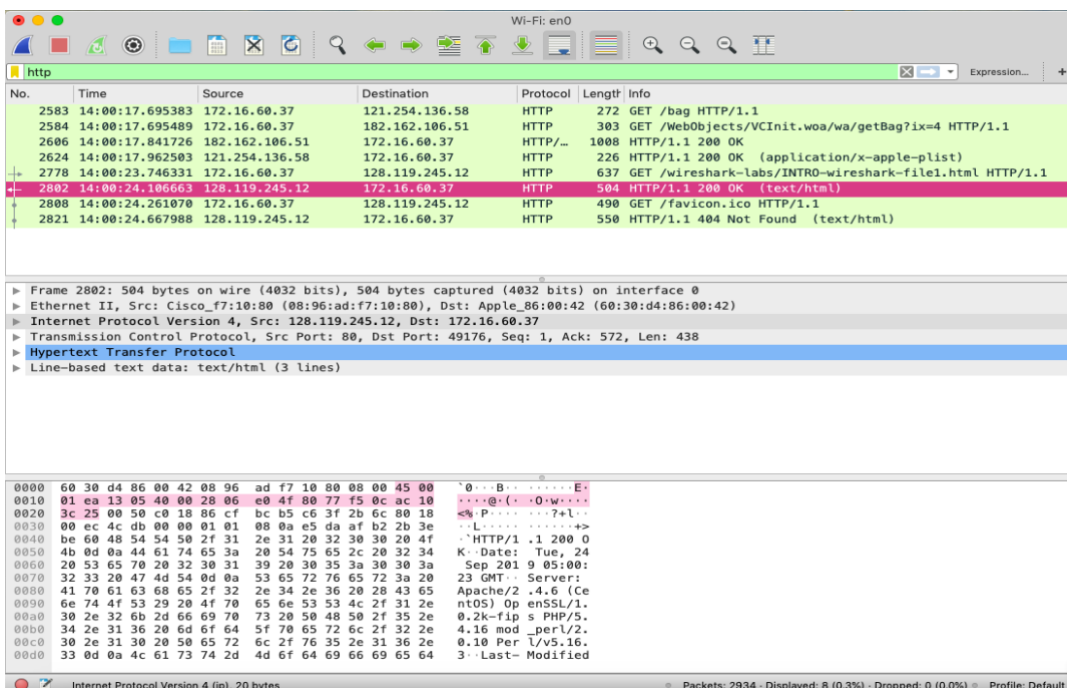# WireShark Homework #1

17011588 노하윤, 17011599 안정연

1.

This picture is from WireShark to Browser (state of GET)

This picture is from Browser to WireShark (state of OK)

2.

Time calculation

- HTTP GET message was sent : 23.106663 sec
- HTTP OK reply was received : 24.746331 sec
- Gap : 0.360332 sec

3.

- Our computer's address : 172.16.60.37
- Browser's address : 172.217.31.238

4. HTTP message(GET and OK)

```
▶ Frame 156: 867 bytes on wire (6936 bits), 867 bytes captured (6936 bits) on interface 0
▶ Ethernet II, Src: Apple_86:00:42 (60:30:d4:86:00:42), Dst: Cisco_f7:10:80 (08:96:ad:f7:10:80)
▶ Internet Protocol Version 4, Src: 172.16.60.37, Dst: 172.217.31.238
▶ Transmission Control Protocol, Src Port: 49343, Dst Port: 80, Seq: 742, Ack: 294, Len: 801
▼ Hypertext Transfer Protocol
  ▶ GET /gen204?sl=en&tl=ko&textlen=45&sp=nmt&ttt=331&ttl=50&ttf=199&sr=1&nca=te_time&client=te_lib&logld=vTE_20190724_00 HTTP/1.1\r\n
    Host: translate.google.com\r\n
    Connection: keep-alive\r\n
    User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/77.0.3865.90 Safari/537.36\r\n
    Accept: image/webp,image/apng,image/*,*/*;q=0.8\r\n
    Referer: http://gaia.cs.umass.edu/\r\n
    Accept-Encoding: gzip, deflate\r\n
    Accept-Language: ko-KR,ko;q=0.9,en-US;q=0.8,en;q=0.7\r\n
  ▶ [truncated]Cookie: _ga=GA1.3.102547024.1564022635; ANID=AHWqTUl2kVkzWIj_JRunk5Y38bDUvjvV6ELf4SUFhP3RSGDg2RRPACEMx6ItTtgt; NID=188=Kjew3MtFQZ542T9R7q81eThsa0m5yTgTX8MrUE4J98
    \r\n
    [Full request URI: http://translate.google.com/gen204?sl=en&tl=ko&textlen=45&sp=nmt&ttt=331&ttl=50&ttf=199&sr=1&nca=te_time&client=te_lib&logld=vTE_20190724_00]
    [HTTP request 2/2]
    [Prev request in frame: 127]
    [Response in frame: 162]
```

```
▶ Frame 162: 359 bytes on wire (2872 bits), 359 bytes captured (2872 bits) on interface 0
▶ Ethernet II, Src: Cisco_f7:10:80 (08:96:ad:f7:10:80), Dst: Apple_86:00:42 (60:30:d4:86:00:42)
▶ Internet Protocol Version 4, Src: 172.217.31.238, Dst: 172.16.60.37
▶ Transmission Control Protocol, Src Port: 80, Dst Port: 49343, Seq: 294, Ack: 1543, Len: 293
▼ Hypertext Transfer Protocol
  ▶ HTTP/1.1 204 No Content\r\n
    Date: Tue, 24 Sep 2019 06:34:58 GMT\r\n
    Expires: Fri, 01 Jan 1990 00:00:00 GMT\r\n
    Cache-Control: no-cache, must-revalidate\r\n
    Pragma: no-cache\r\n
    Content-Type: image/gif\r\n
    X-Content-Type-Options: nosniff\r\n
    Server: HTTP server (unknown)\r\n
  ▶ Content-Length: 0\r\n
    X-XSS-Protection: 0\r\n
    \r\n
    [HTTP response 2/2]
    [Time since request: 0.074427000 seconds]
    [Prev request in frame: 127]
    [Prev response in frame: 134]
```