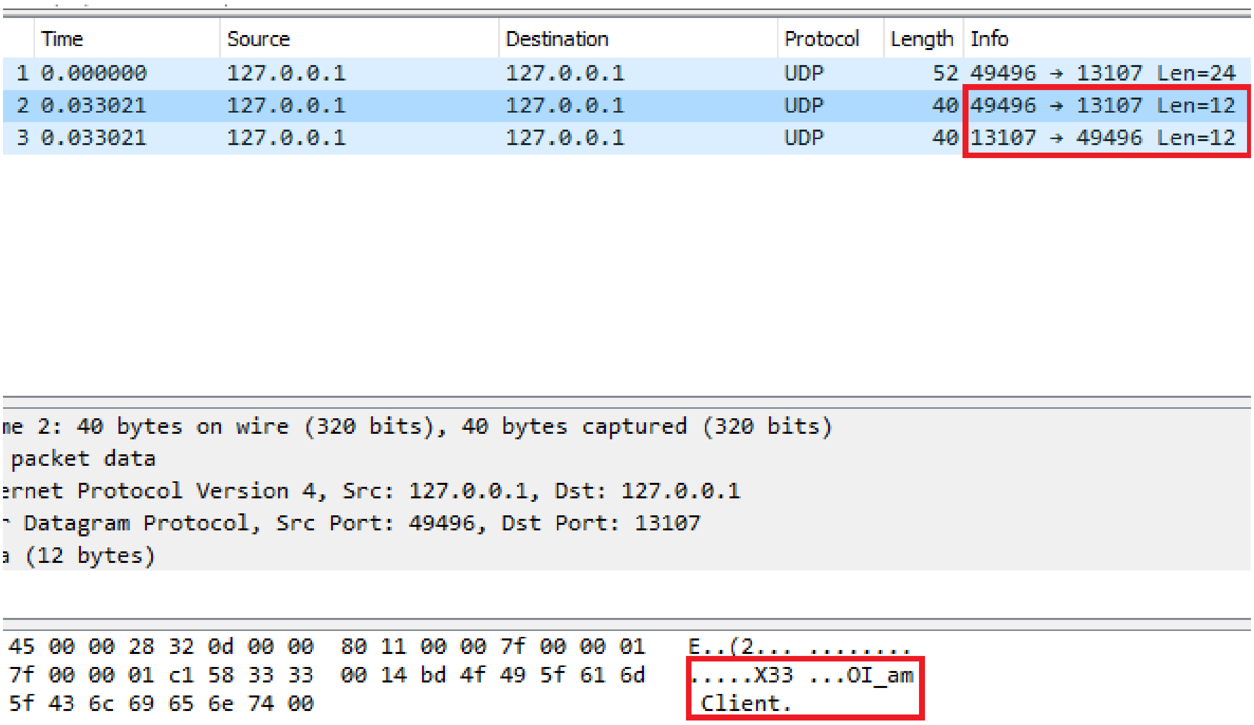
Name:****

ID:*****

Part A

1-5)

The client sends a message “I_am_Client” to the server. With 49496 port on the 13107 port.

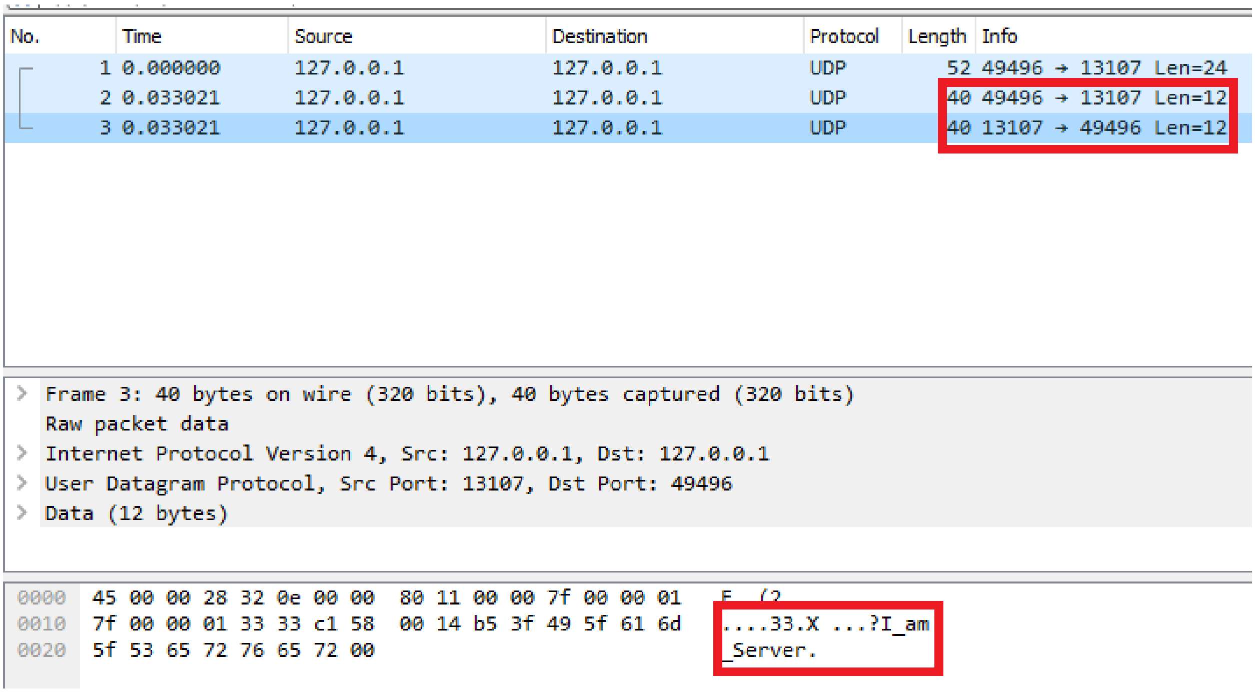


```
   Time        Source          Destination     Protocol  Length  Info
 1 0.000000    127.0.0.1       127.0.0.1       UDP           52  49496 → 13107 Len=24
 2 0.033021    127.0.0.1       127.0.0.1       UDP           40  49496 → 13107 Len=12
 3 0.033021    127.0.0.1       127.0.0.1       UDP           40  13107 → 49496 Len=12
```

```
me 2: 40 bytes on wire (320 bits), 40 bytes captured (320 bits)
 packet data
ernet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
 Datagram Protocol, Src Port: 49496, Dst Port: 13107
a (12 bytes)
```

```
45 00 00 28 32 0d 00 00  80 11 00 00 7f 00 00 01   E..(2... ........
7f 00 00 01 c1 58 33 33  00 14 bd 4f 49 5f 61 6d   .....X33 ...OI_am
5f 43 6c 69 65 6e 74 00                             _Client.
```

The server sends a message “I_am_Server” to the client. From 13107 port to 49496 port.



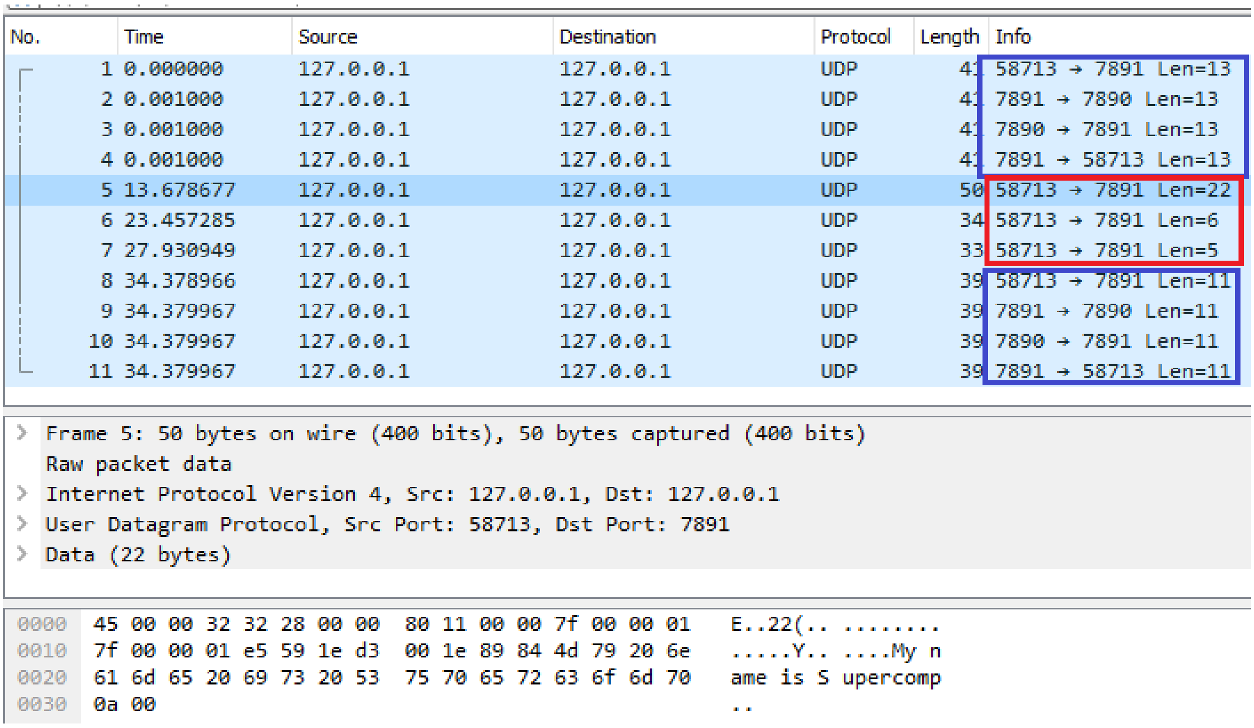
```
No.   Time        Source          Destination     Protocol  Length  Info
   1  0.000000    127.0.0.1       127.0.0.1       UDP           52  49496 → 13107 Len=24
   2  0.033021    127.0.0.1       127.0.0.1       UDP           40  49496 → 13107 Len=12
   3  0.033021    127.0.0.1       127.0.0.1       UDP           40  13107 → 49496 Len=12
```

```
> Frame 3: 40 bytes on wire (320 bits), 40 bytes captured (320 bits)
  Raw packet data
> Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
> User Datagram Protocol, Src Port: 13107, Dst Port: 49496
> Data (12 bytes)
```

```
0000  45 00 00 28 32 0e 00 00  80 11 00 00 7f 00 00 01   E..(2...
0010  7f 00 00 01 33 33 c1 58  00 14 b5 3f 49 5f 61 6d   ....33.X ...?I_am
0020  5f 53 65 72 76 65 72 00                             _Server.
```

6)

The blue boxes show the process as the client sends a message to the router and the router it to the server, the server sends a response to the router and the router sends it to the client. In the red box shows three messages, which the router decided not to process.



No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	127.0.0.1	127.0.0.1	UDP	41	58713 → 7891 Len=13
2	0.001000	127.0.0.1	127.0.0.1	UDP	41	7891 → 7890 Len=13
3	0.001000	127.0.0.1	127.0.0.1	UDP	41	7890 → 7891 Len=13
4	0.001000	127.0.0.1	127.0.0.1	UDP	41	7891 → 58713 Len=13
5	13.678677	127.0.0.1	127.0.0.1	UDP	50	58713 → 7891 Len=22
6	23.457285	127.0.0.1	127.0.0.1	UDP	34	58713 → 7891 Len=6
7	27.930949	127.0.0.1	127.0.0.1	UDP	33	58713 → 7891 Len=5
8	34.378966	127.0.0.1	127.0.0.1	UDP	39	58713 → 7891 Len=11
9	34.379967	127.0.0.1	127.0.0.1	UDP	39	7891 → 7890 Len=11
10	34.379967	127.0.0.1	127.0.0.1	UDP	39	7890 → 7891 Len=11
11	34.379967	127.0.0.1	127.0.0.1	UDP	39	7891 → 58713 Len=11

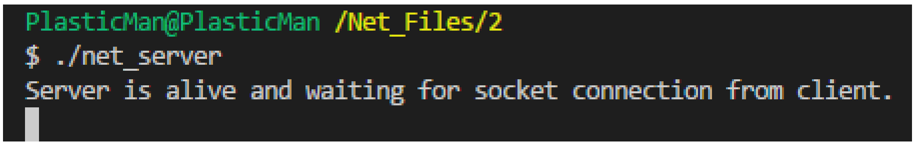
```
> Frame 5: 50 bytes on wire (400 bits), 50 bytes captured (400 bits)
  Raw packet data
> Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
> User Datagram Protocol, Src Port: 58713, Dst Port: 7891
> Data (22 bytes)
```

```
0000  45 00 00 32 32 28 00 00  80 11 00 00 7f 00 00 01   E..22(.. ........
0010  7f 00 00 01 e5 59 1e d3  00 1e 89 84 4d 79 20 6e   .....Y.. ....My n
0020  61 6d 65 20 69 73 20 53  75 70 65 72 63 6f 6d 70   ame is S upercomp
0030  0a 00                                              ..
```

Part B

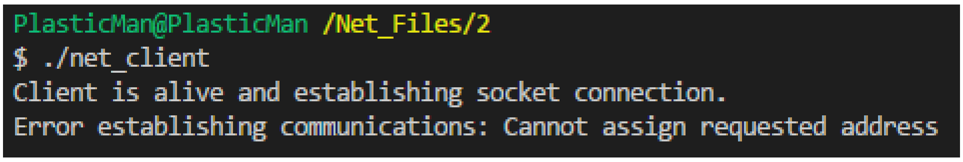
1-3)

Once we ran the server it posted that it listens for requests as shown below:



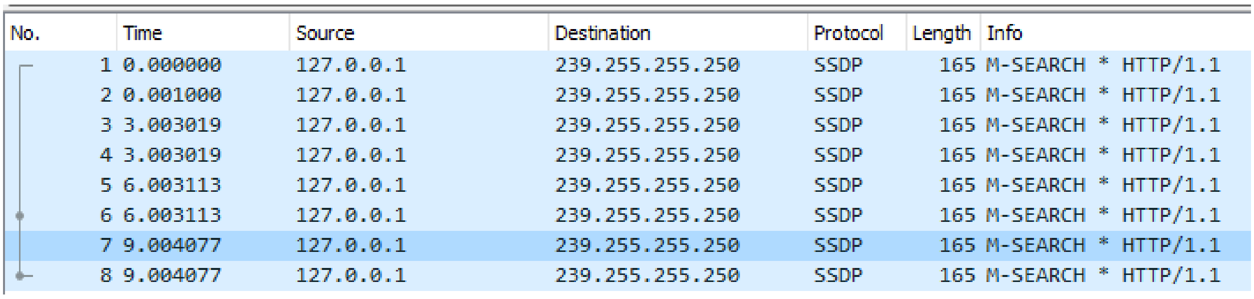
```
PlasticMan@PlasticMan /Net_Files/2
$ ./net_server
Server is alive and waiting for socket connection from client.
```

After that we ran the client and saw a bunch of lines being printed to the terminal as shown below:



```
PlasticMan@PlasticMan /Net_Files/2
$ ./net_client
Client is alive and establishing socket connection.
Error establishing communications: Cannot assign requested address
```

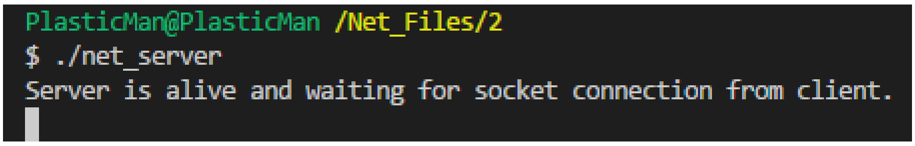
Since the variable IP_ADDRESS (“net_client.c”) is incorrect address(“?????”).



No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	127.0.0.1	239.255.255.250	SSDP	165	M-SEARCH * HTTP/1.1
2	0.001000	127.0.0.1	239.255.255.250	SSDP	165	M-SEARCH * HTTP/1.1
3	3.003019	127.0.0.1	239.255.255.250	SSDP	165	M-SEARCH * HTTP/1.1
4	3.003019	127.0.0.1	239.255.255.250	SSDP	165	M-SEARCH * HTTP/1.1
5	6.003113	127.0.0.1	239.255.255.250	SSDP	165	M-SEARCH * HTTP/1.1
6	6.003113	127.0.0.1	239.255.255.250	SSDP	165	M-SEARCH * HTTP/1.1
7	9.004077	127.0.0.1	239.255.255.250	SSDP	165	M-SEARCH * HTTP/1.1
8	9.004077	127.0.0.1	239.255.255.250	SSDP	165	M-SEARCH * HTTP/1.1

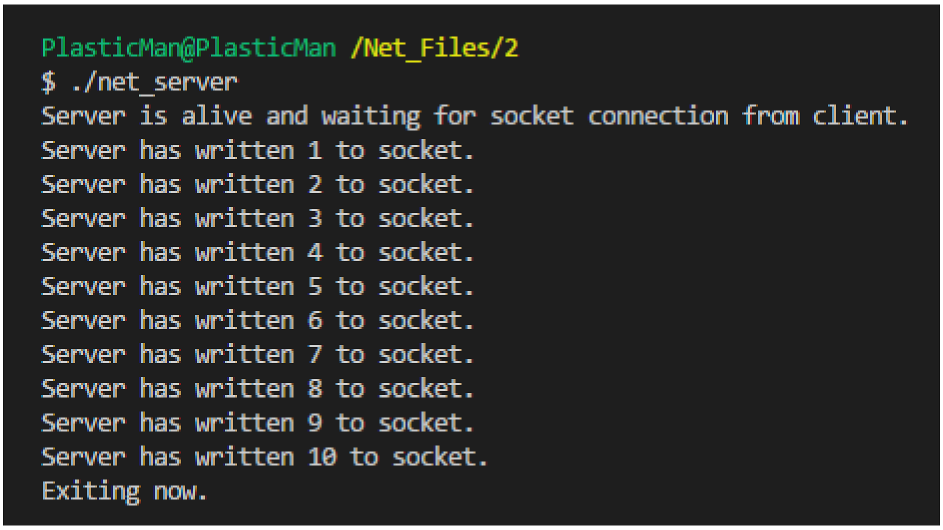
4-6)

Once we ran the server it posted that it listens for requests as shown below:



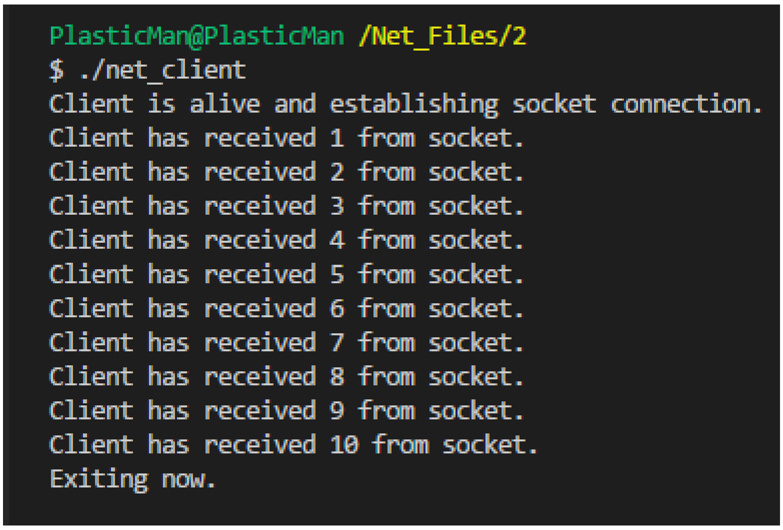
```
PlasticMan@PlasticMan /Net_Files/2
$ ./net_server
Server is alive and waiting for socket connection from client.
```

After that we ran the client and saw a bunch of lines being printed to the terminal as shown below:



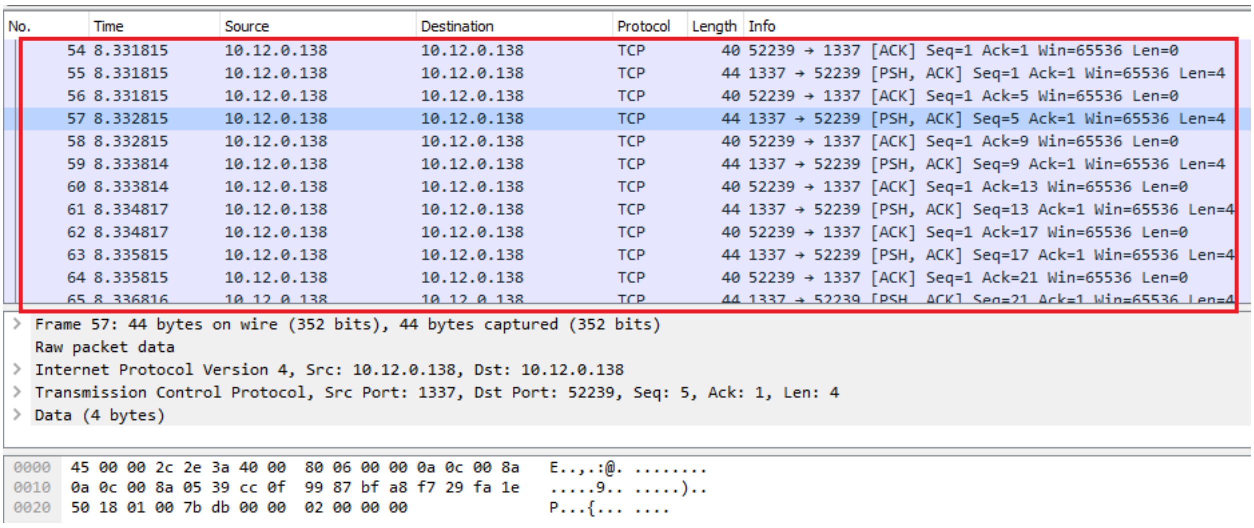
```
PlasticMan@PlasticMan /Net_Files/2
$ ./net_server
Server is alive and waiting for socket connection from client.
Server has written 1 to socket.
Server has written 2 to socket.
Server has written 3 to socket.
Server has written 4 to socket.
Server has written 5 to socket.
Server has written 6 to socket.
Server has written 7 to socket.
Server has written 8 to socket.
Server has written 9 to socket.
Server has written 10 to socket.
Exiting now.
```

after, new lines are added to the server terminal:



```
PlasticMan@PlasticMan /Net_Files/2
$ ./net_client
Client is alive and establishing socket connection.
Client has received 1 from socket.
Client has received 2 from socket.
Client has received 3 from socket.
Client has received 4 from socket.
Client has received 5 from socket.
Client has received 6 from socket.
Client has received 7 from socket.
Client has received 8 from socket.
Client has received 9 from socket.
Client has received 10 from socket.
Exiting now.
```

We can see the client establishing connection, server sending a bunch of response all together to the client (batched responses). After that the clients prints those responses.



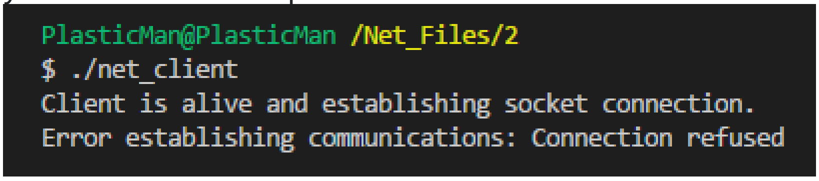
```
No.   Time       Source        Destination   Protocol Length Info
   54 8.331815   10.12.0.138   10.12.0.138   TCP        40 52239 → 1337 [ACK] Seq=1 Ack=1 Win=65536 Len=0
   55 8.331815   10.12.0.138   10.12.0.138   TCP        44 1337 → 52239 [PSH, ACK] Seq=1 Ack=1 Win=65536 Len=4
   56 8.331815   10.12.0.138   10.12.0.138   TCP        40 52239 → 1337 [ACK] Seq=1 Ack=5 Win=65536 Len=0
   57 8.332815   10.12.0.138   10.12.0.138   TCP        44 1337 → 52239 [PSH, ACK] Seq=5 Ack=1 Win=65536 Len=4
   58 8.332815   10.12.0.138   10.12.0.138   TCP        40 52239 → 1337 [ACK] Seq=1 Ack=9 Win=65536 Len=0
   59 8.333814   10.12.0.138   10.12.0.138   TCP        44 1337 → 52239 [PSH, ACK] Seq=9 Ack=1 Win=65536 Len=4
   60 8.333814   10.12.0.138   10.12.0.138   TCP        40 52239 → 1337 [ACK] Seq=1 Ack=13 Win=65536 Len=0
   61 8.334817   10.12.0.138   10.12.0.138   TCP        44 1337 → 52239 [PSH, ACK] Seq=13 Ack=1 Win=65536 Len=4
   62 8.334817   10.12.0.138   10.12.0.138   TCP        40 52239 → 1337 [ACK] Seq=1 Ack=17 Win=65536 Len=0
   63 8.335815   10.12.0.138   10.12.0.138   TCP        44 1337 → 52239 [PSH, ACK] Seq=17 Ack=1 Win=65536 Len=4
   64 8.335815   10.12.0.138   10.12.0.138   TCP        40 52239 → 1337 [ACK] Seq=1 Ack=21 Win=65536 Len=0
   65 8.336816   10.12.0.138   10.12.0.138   TCP        44 1337 → 52239 [PSH, ACK] Seq=21 Ack=1 Win=65536 Len=4
```

```
> Frame 57: 44 bytes on wire (352 bits), 44 bytes captured (352 bits)
  Raw packet data
> Internet Protocol Version 4, Src: 10.12.0.138, Dst: 10.12.0.138
> Transmission Control Protocol, Src Port: 1337, Dst Port: 52239, Seq: 5, Ack: 1, Len: 4
> Data (4 bytes)
```

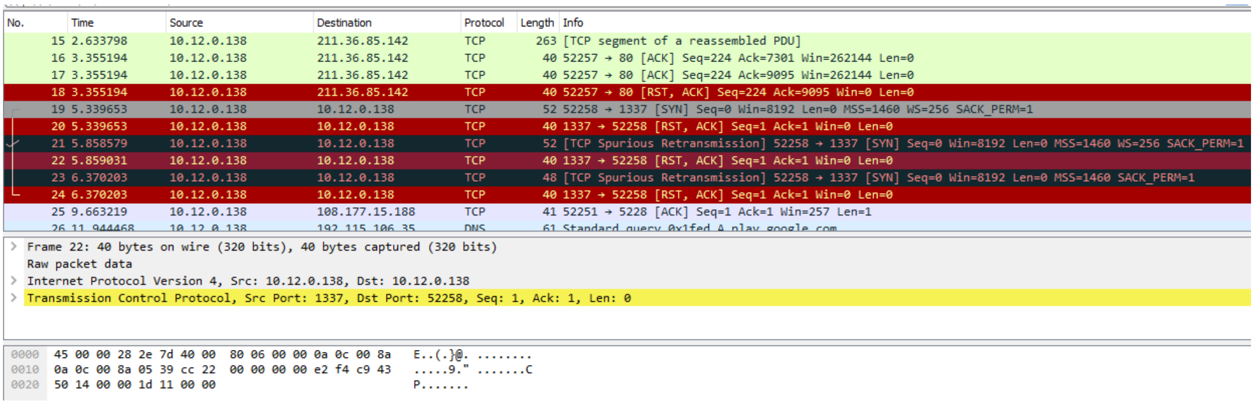
```
0000  45 00 00 2c 2e 3a 40 00  80 06 00 00 0a 0c 00 8a   E..,.:@. ........
0010  0a 0c 00 8a 05 39 cc 0f  99 87 bf a8 f7 29 fa 1e   .....9.. .....)..
0020  50 18 01 00 7b db 00 00  02 00 00 00               P...{... ....
```

7)

“Error establishing communications” happens because bind() and connect() make to on the same address. If the specified port is being listened to by someone, then connect, if not, you will receive a response "Connection refused".



```
PlasticMan@PlasticMan /Net_Files/2
$ ./net_client
Client is alive and establishing socket connection.
Error establishing communications: Connection refused
```

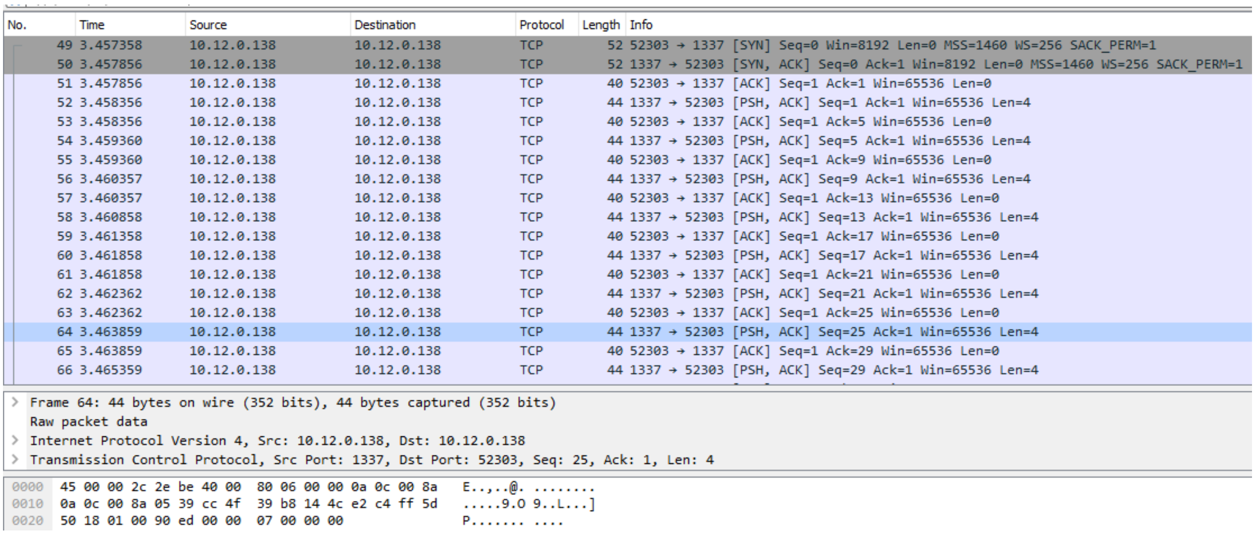


```
No.   Time       Source        Destination     Protocol Length Info
   15 2.633798   10.12.0.138   211.36.85.142   TCP       263 [TCP segment of a reassembled PDU]
   16 3.355194   10.12.0.138   211.36.85.142   TCP        40 52257 → 80 [ACK] Seq=224 Ack=7301 Win=262144 Len=0
   17 3.355194   10.12.0.138   211.36.85.142   TCP        40 52257 → 80 [ACK] Seq=224 Ack=9095 Win=262144 Len=0
   18 3.355194   10.12.0.138   211.36.85.142   TCP        40 52257 → 80 [RST, ACK] Seq=224 Ack=9095 Win=0 Len=0
   19 5.339653   10.12.0.138   10.12.0.138     TCP        52 52258 → 1337 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=256 SACK_PERM=1
   20 5.339653   10.12.0.138   10.12.0.138     TCP        40 1337 → 52258 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
   21 5.858579   10.12.0.138   10.12.0.138     TCP        52 [TCP Spurious Retransmission] 52258 → 1337 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=256 SACK_PERM=1
   22 5.859031   10.12.0.138   10.12.0.138     TCP        40 1337 → 52258 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
   23 6.370203   10.12.0.138   10.12.0.138     TCP        48 [TCP Spurious Retransmission] 52258 → 1337 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 SACK_PERM=1
   24 6.370203   10.12.0.138   10.12.0.138     TCP        40 1337 → 52258 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
   25 9.663219   10.12.0.138   108.177.15.188  TCP        41 52251 → 5228 [ACK] Seq=1 Ack=1 Win=257 Len=1
   26 11.944468  10.12.0.138   192.115.106.35  DNS        61 Standard query 0x1fed A play.google.com
```

```
> Frame 22: 40 bytes on wire (320 bits), 40 bytes captured (320 bits)
  Raw packet data
> Internet Protocol Version 4, Src: 10.12.0.138, Dst: 10.12.0.138
> Transmission Control Protocol, Src Port: 1337, Dst Port: 52258, Seq: 1, Ack: 1, Len: 0
```

```
0000  45 00 00 28 2e 7d 40 00  80 06 00 00 0a 0c 00 8a   E..(.}@. ........
0010  0a 0c 00 8a 05 39 cc 22  00 00 00 00 e2 f4 c9 43   .....9." .......C
0020  50 14 00 00 1d 11 00 00                            P.......
```

8-9)



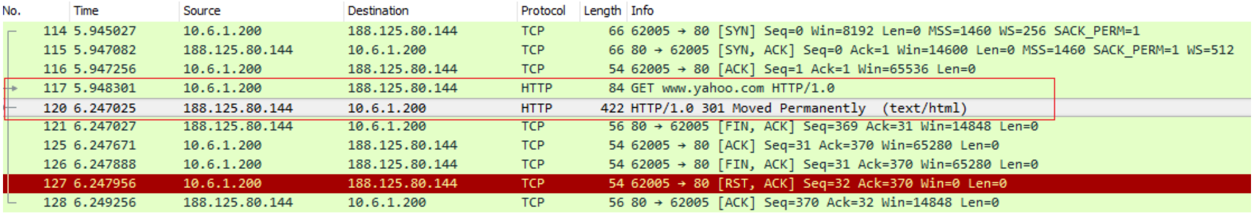
```
No.   Time       Source        Destination   Protocol Length Info
   49 3.457358   10.12.0.138   10.12.0.138   TCP        52 52303 → 1337 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=256 SACK_PERM=1
   50 3.457856   10.12.0.138   10.12.0.138   TCP        52 1337 → 52303 [SYN, ACK] Seq=0 Ack=1 Win=8192 Len=0 MSS=1460 WS=256 SACK_PERM=1
   51 3.457856   10.12.0.138   10.12.0.138   TCP        40 52303 → 1337 [ACK] Seq=1 Ack=1 Win=65536 Len=0
   52 3.458356   10.12.0.138   10.12.0.138   TCP        44 1337 → 52303 [PSH, ACK] Seq=1 Ack=1 Win=65536 Len=4
   53 3.458356   10.12.0.138   10.12.0.138   TCP        40 52303 → 1337 [ACK] Seq=1 Ack=5 Win=65536 Len=0
   54 3.459360   10.12.0.138   10.12.0.138   TCP        44 1337 → 52303 [PSH, ACK] Seq=5 Ack=1 Win=65536 Len=4
   55 3.459360   10.12.0.138   10.12.0.138   TCP        40 52303 → 1337 [ACK] Seq=1 Ack=9 Win=65536 Len=0
   56 3.460357   10.12.0.138   10.12.0.138   TCP        44 1337 → 52303 [PSH, ACK] Seq=9 Ack=1 Win=65536 Len=4
   57 3.460357   10.12.0.138   10.12.0.138   TCP        40 52303 → 1337 [ACK] Seq=1 Ack=13 Win=65536 Len=0
   58 3.460858   10.12.0.138   10.12.0.138   TCP        44 1337 → 52303 [PSH, ACK] Seq=13 Ack=1 Win=65536 Len=4
   59 3.461358   10.12.0.138   10.12.0.138   TCP        40 52303 → 1337 [ACK] Seq=1 Ack=17 Win=65536 Len=0
   60 3.461858   10.12.0.138   10.12.0.138   TCP        44 1337 → 52303 [PSH, ACK] Seq=17 Ack=1 Win=65536 Len=4
   61 3.461858   10.12.0.138   10.12.0.138   TCP        40 52303 → 1337 [ACK] Seq=1 Ack=21 Win=65536 Len=0
   62 3.462362   10.12.0.138   10.12.0.138   TCP        44 1337 → 52303 [PSH, ACK] Seq=21 Ack=1 Win=65536 Len=4
   63 3.462362   10.12.0.138   10.12.0.138   TCP        40 52303 → 1337 [ACK] Seq=1 Ack=25 Win=65536 Len=0
   64 3.463859   10.12.0.138   10.12.0.138   TCP        44 1337 → 52303 [PSH, ACK] Seq=25 Ack=1 Win=65536 Len=4
   65 3.463859   10.12.0.138   10.12.0.138   TCP        40 52303 → 1337 [ACK] Seq=1 Ack=29 Win=65536 Len=0
   66 3.465359   10.12.0.138   10.12.0.138   TCP        44 1337 → 52303 [PSH, ACK] Seq=29 Ack=1 Win=65536 Len=4
```

```
> Frame 64: 44 bytes on wire (352 bits), 44 bytes captured (352 bits)
  Raw packet data
> Internet Protocol Version 4, Src: 10.12.0.138, Dst: 10.12.0.138
> Transmission Control Protocol, Src Port: 1337, Dst Port: 52303, Seq: 25, Ack: 1, Len: 4
```

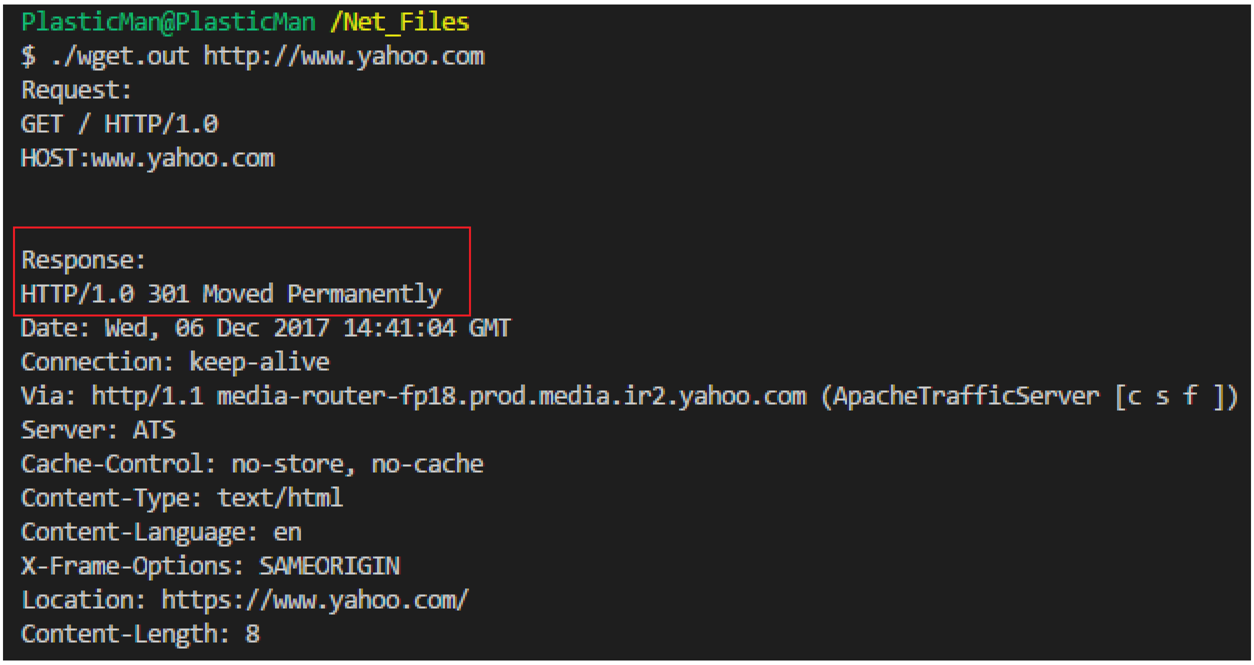
```
0000  45 00 00 2c 2e be 40 00  80 06 00 00 0a 0c 00 8a   E..,..@. ........
0010  0a 0c 00 8a 05 39 cc 4f  39 b8 14 4c e2 c4 ff 5d   .....9.O 9..L...]
0020  50 18 01 00 90 ed 00 00  07 00 00 00               P....... ....
```

Part C

1-4)



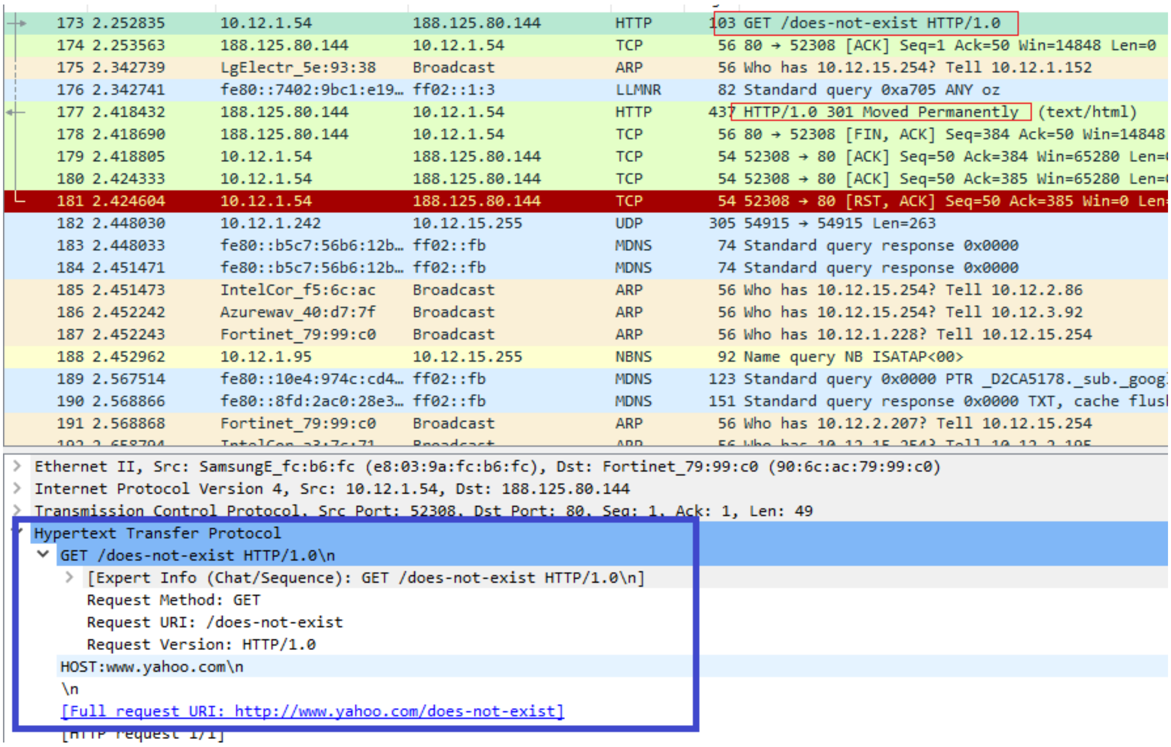
No.	Time	Source	Destination	Protocol	Length	Info
114	5.945027	10.6.1.200	188.125.80.144	TCP	66	62005 → 80 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=256 SACK_PERM=1
115	5.947082	188.125.80.144	10.6.1.200	TCP	66	80 → 62005 [SYN, ACK] Seq=0 Ack=1 Win=14600 Len=0 MSS=1460 SACK_PERM=1 WS=512
116	5.947256	10.6.1.200	188.125.80.144	TCP	54	62005 → 80 [ACK] Seq=1 Ack=1 Win=65536 Len=0
117	5.948301	10.6.1.200	188.125.80.144	HTTP	84	GET www.yahoo.com HTTP/1.0
120	6.247025	188.125.80.144	10.6.1.200	HTTP	422	HTTP/1.0 301 Moved Permanently (text/html)
121	6.247027	188.125.80.144	10.6.1.200	TCP	56	80 → 62005 [FIN, ACK] Seq=369 Ack=31 Win=14848 Len=0
125	6.247671	10.6.1.200	188.125.80.144	TCP	54	62005 → 80 [ACK] Seq=31 Ack=370 Win=65280 Len=0
126	6.247888	10.6.1.200	188.125.80.144	TCP	54	62005 → 80 [FIN, ACK] Seq=31 Ack=370 Win=65280 Len=0
127	6.247956	10.6.1.200	188.125.80.144	TCP	54	62005 → 80 [RST, ACK] Seq=32 Ack=370 Win=0 Len=0
128	6.249256	188.125.80.144	10.6.1.200	TCP	56	80 → 62005 [ACK] Seq=370 Ack=32 Win=14848 Len=0



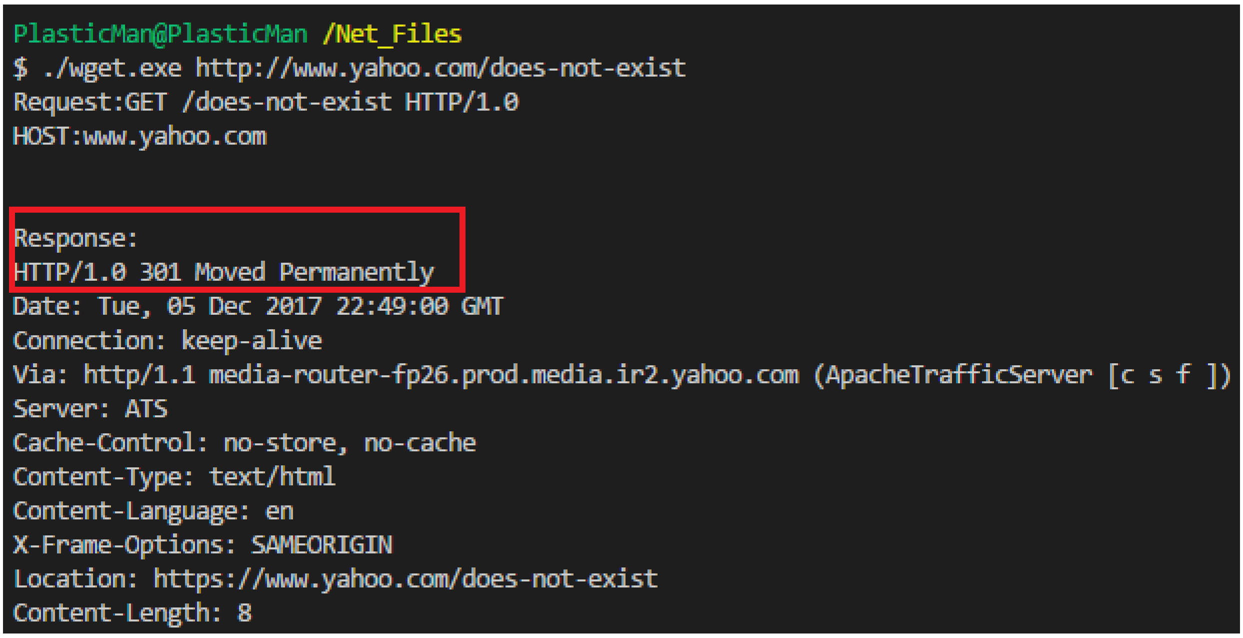
```
PlasticMan@PlasticMan /Net_Files
$ ./wget.out http://www.yahoo.com
Request:
GET / HTTP/1.0
HOST:www.yahoo.com


Response:
HTTP/1.0 301 Moved Permanently
Date: Wed, 06 Dec 2017 14:41:04 GMT
Connection: keep-alive
Via: http/1.1 media-router-fp18.prod.media.ir2.yahoo.com (ApacheTrafficServer [c s f ])
Server: ATS
Cache-Control: no-store, no-cache
Content-Type: text/html
Content-Language: en
X-Frame-Options: SAMEORIGIN
Location: https://www.yahoo.com/
Content-Length: 8
```

The HTTP response status code **301 Moved Permanently** is used for permanent URL redirection, meaning current links or records using the URL that the response is received for should be updated. The new URL should be provided in the Location field included with the response.

5)

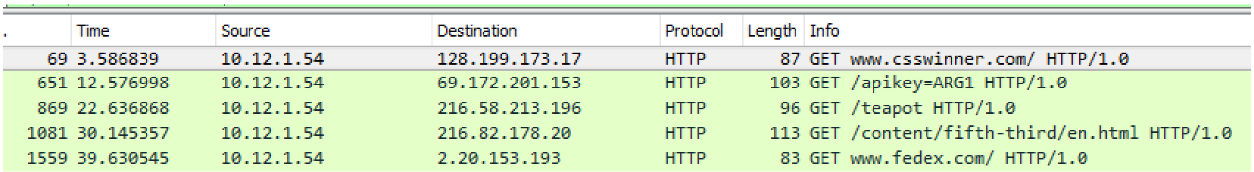


```
173 2.252835   10.12.1.54           188.125.80.144   HTTP    103 GET /does-not-exist HTTP/1.0
174 2.253563   188.125.80.144       10.12.1.54       TCP      56 80 → 52308 [ACK] Seq=1 Ack=50 Win=14848 Len=0
175 2.342739   LgElectr_5e:93:38    Broadcast        ARP      56 Who has 10.12.15.254? Tell 10.12.1.152
176 2.342741   fe80::7402:9bc1:e19… ff02::1:3        LLMNR    82 Standard query 0xa705 ANY oz
177 2.418432   188.125.80.144       10.12.1.54       HTTP    437 HTTP/1.0 301 Moved Permanently  (text/html)
178 2.418690   188.125.80.144       10.12.1.54       TCP      56 80 → 52308 [FIN, ACK] Seq=384 Ack=50 Win=14848
179 2.418805   10.12.1.54           188.125.80.144   TCP      54 52308 → 80 [ACK] Seq=50 Ack=384 Win=65280 Len=
180 2.424333   10.12.1.54           188.125.80.144   TCP      54 52308 → 80 [ACK] Seq=50 Ack=385 Win=65280 Len=
181 2.424604   10.12.1.54           188.125.80.144   TCP      54 52308 → 80 [RST, ACK] Seq=50 Ack=385 Win=0 Len
182 2.448030   10.12.1.242          10.12.15.255     UDP     305 54915 → 54915 Len=263
183 2.448033   fe80::b5c7:56b6:12b… ff02::fb         MDNS     74 Standard query response 0x0000
184 2.451471   fe80::b5c7:56b6:12b… ff02::fb         MDNS     74 Standard query response 0x0000
185 2.451473   IntelCor_f5:6c:ac    Broadcast        ARP      56 Who has 10.12.15.254? Tell 10.12.2.86
186 2.452242   Azurewav_40:d7:7f    Broadcast        ARP      56 Who has 10.12.15.254? Tell 10.12.3.92
187 2.452243   Fortinet_79:99:c0    Broadcast        ARP      56 Who has 10.12.1.228? Tell 10.12.15.254
188 2.452962   10.12.1.95           10.12.15.255     NBNS     92 Name query NB ISATAP<00>
189 2.567514   fe80::10e4:974c:cd4… ff02::fb         MDNS    123 Standard query 0x0000 PTR _D2CA5178._sub._goog
190 2.568866   fe80::8fd:2ac0:28e3… ff02::fb         MDNS    151 Standard query response 0x0000 TXT, cache flus
191 2.568868   Fortinet_79:99:c0    Broadcast        ARP      56 Who has 10.12.2.207? Tell 10.12.15.254
192 2.658704   IntelCor_a3:7c:71    Broadcast        ARP      56 Who has 10.12.15.254? Tell 10.12.2.105

> Ethernet II, Src: SamsungE_fc:b6:fc (e8:03:9a:fc:b6:fc), Dst: Fortinet_79:99:c0 (90:6c:ac:79:99:c0)
> Internet Protocol Version 4, Src: 10.12.1.54, Dst: 188.125.80.144
> Transmission Control Protocol, Src Port: 52308, Dst Port: 80, Seq: 1, Ack: 1, Len: 49
v Hypertext Transfer Protocol
  v GET /does-not-exist HTTP/1.0\n
    > [Expert Info (Chat/Sequence): GET /does-not-exist HTTP/1.0\n]
      Request Method: GET
      Request URI: /does-not-exist
      Request Version: HTTP/1.0
    HOST:www.yahoo.com\n
    \n
    [Full request URI: http://www.yahoo.com/does-not-exist]
    [HTTP request 1/1]
```

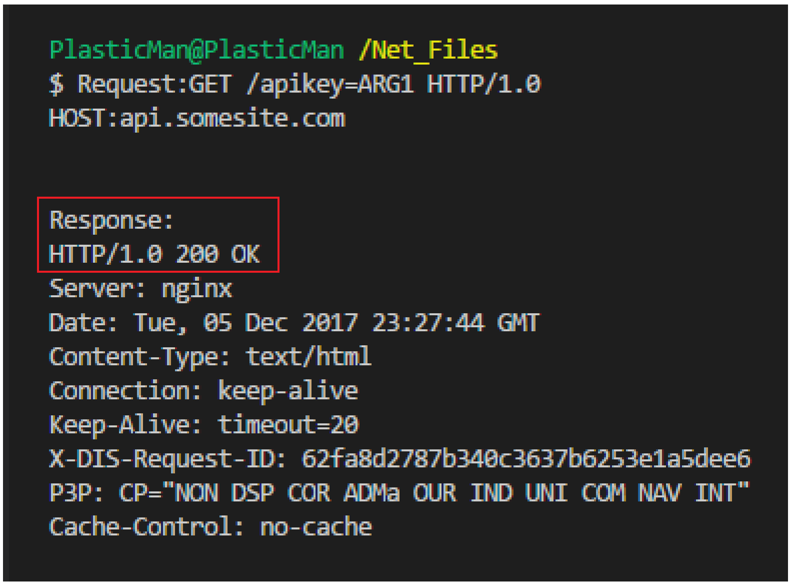


```
PlasticMan@PlasticMan /Net_Files
$ ./wget.exe http://www.yahoo.com/does-not-exist
Request:GET /does-not-exist HTTP/1.0
HOST:www.yahoo.com


Response:
HTTP/1.0 301 Moved Permanently
Date: Tue, 05 Dec 2017 22:49:00 GMT
Connection: keep-alive
Via: http/1.1 media-router-fp26.prod.media.ir2.yahoo.com (ApacheTrafficServer [c s f ])
Server: ATS
Cache-Control: no-store, no-cache
Content-Type: text/html
Content-Language: en
X-Frame-Options: SAMEORIGIN
Location: https://www.yahoo.com/does-not-exist
Content-Length: 8
```

6)

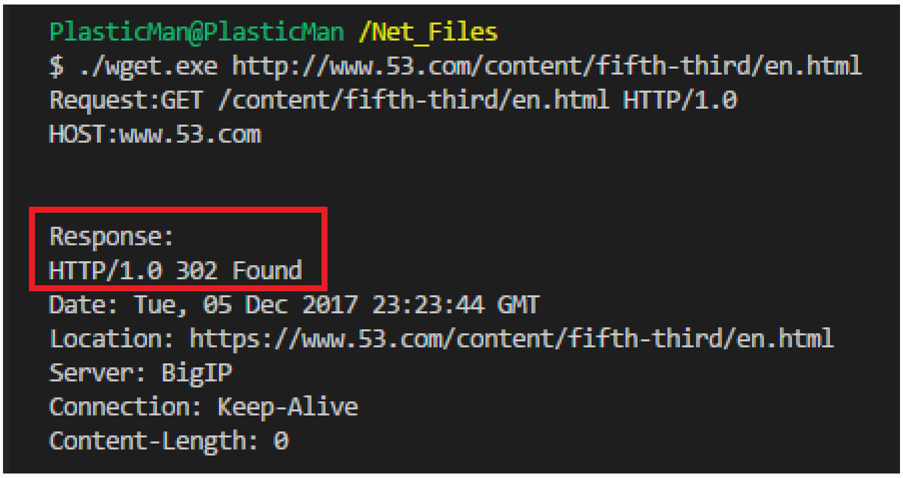


```
.     Time        Source       Destination      Protocol  Length  Info
  69  3.586839    10.12.1.54   128.199.173.17   HTTP        87  GET www.csswinner.com/ HTTP/1.0
 651  12.576998   10.12.1.54   69.172.201.153   HTTP       103  GET /apikey=ARG1 HTTP/1.0
 869  22.636868   10.12.1.54   216.58.213.196   HTTP        96  GET /teapot HTTP/1.0
1081  30.145357   10.12.1.54   216.82.178.20    HTTP       113  GET /content/fifth-third/en.html HTTP/1.0
1559  39.630545   10.12.1.54   2.20.153.193     HTTP        83  GET www.fedex.com/ HTTP/1.0
```



```
PlasticMan@PlasticMan /Net_Files
$ Request:GET /apikey=ARG1 HTTP/1.0
HOST:api.somesite.com


Response:
HTTP/1.0 200 OK
Server: nginx
Date: Tue, 05 Dec 2017 23:27:44 GMT
Content-Type: text/html
Connection: keep-alive
Keep-Alive: timeout=20
X-DIS-Request-ID: 62fa8d2787b340c3637b6253e1a5dee6
P3P: CP="NON DSP COR ADMa OUR IND UNI COM NAV INT"
Cache-Control: no-cache
```

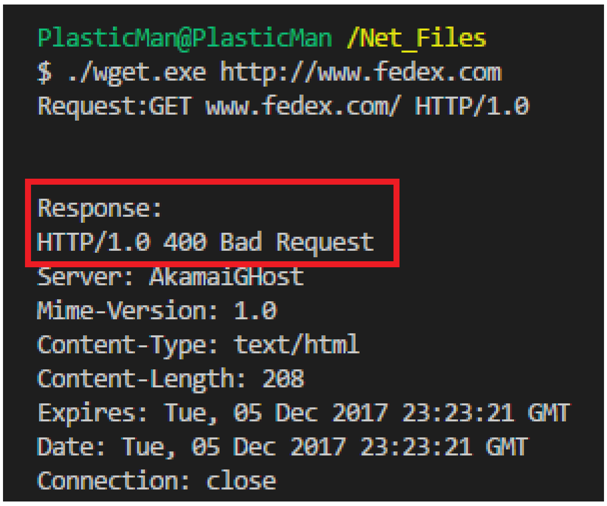
200 OK
Standard response for successful HTTP requests. The actual response will depend on the request method used. In a GET request, the response will contain an entity corresponding to the requested resource.



```
PlasticMan@PlasticMan /Net_Files
$ ./wget.exe http://www.53.com/content/fifth-third/en.html
Request:GET /content/fifth-third/en.html HTTP/1.0
HOST:www.53.com


Response:
HTTP/1.0 302 Found
Date: Tue, 05 Dec 2017 23:23:44 GMT
Location: https://www.53.com/content/fifth-third/en.html
Server: BigIP
Connection: Keep-Alive
Content-Length: 0
```

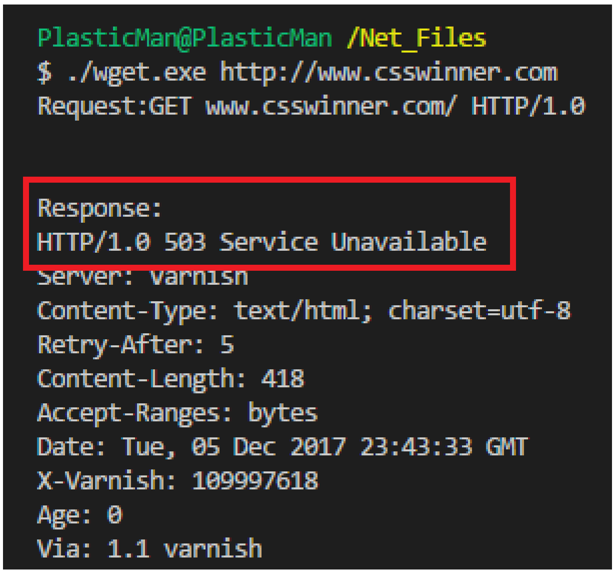
302 Found

An HTTP response with this status code will additionally provide a URL in the header field ***location***. The user agent is invited by a response with this code to make a second, otherwise identical, request to the new URL specified in the location field. The HTTP/1.0 specification initially defined this code, and gives it the description phrase "Moved Temporarily".



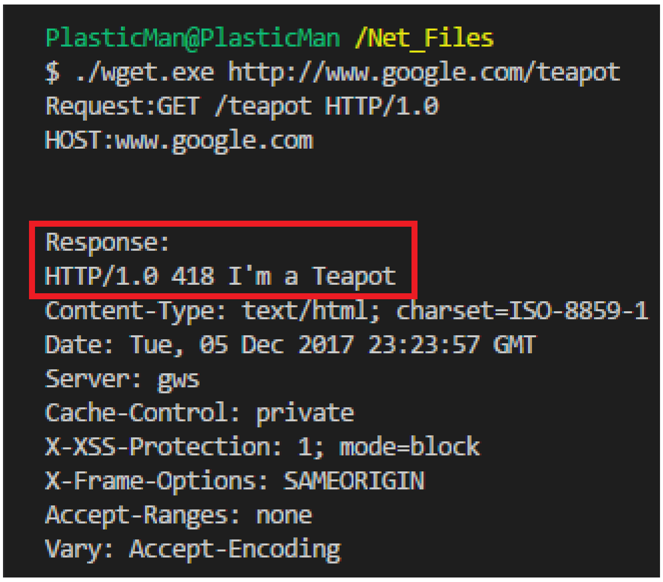
```
PlasticMan@PlasticMan /Net_Files
$ ./wget.exe http://www.fedex.com
Request:GET www.fedex.com/ HTTP/1.0


Response:
HTTP/1.0 400 Bad Request
Server: AkamaiGHost
Mime-Version: 1.0
Content-Type: text/html
Content-Length: 208
Expires: Tue, 05 Dec 2017 23:23:21 GMT
Date: Tue, 05 Dec 2017 23:23:21 GMT
Connection: close
```

400 Bad Request
The server cannot or will not process the request due to an apparent client error (e.g., malformed request syntax, size too large, invalid request message framing, or deceptive request routing).



```
PlasticMan@PlasticMan /Net_Files
$ ./wget.exe http://www.csswinner.com
Request:GET www.csswinner.com/ HTTP/1.0


Response:
HTTP/1.0 503 Service Unavailable
Server: Varnish
Content-Type: text/html; charset=utf-8
Retry-After: 5
Content-Length: 418
Accept-Ranges: bytes
Date: Tue, 05 Dec 2017 23:43:33 GMT
X-Varnish: 109997618
Age: 0
Via: 1.1 varnish
```

503 Service Unavailable
The server is currently unavailable (because it is overloaded or down for maintenance). Generally, this is a temporary state



```
PlasticMan@PlasticMan /Net_Files
$ ./wget.exe http://www.google.com/teapot
Request:GET /teapot HTTP/1.0
HOST:www.google.com


Response:
HTTP/1.0 418 I'm a Teapot
Content-Type: text/html; charset=ISO-8859-1
Date: Tue, 05 Dec 2017 23:23:57 GMT
Server: gws
Cache-Control: private
X-XSS-Protection: 1; mode=block
X-Frame-Options: SAMEORIGIN
Accept-Ranges: none
Vary: Accept-Encoding
```

418 I'm a teapot

This code was defined in 1998 as one of the traditional IETF April Fools' jokes, in RFC 2324, Hyper Text Coffee Pot Control Protocol, and is not expected to be implemented by actual HTTP servers. The RFC specifies this code should be returned by teapots requested to brew coffee. This HTTP status is used as an Easter_egg in some websites, including Google.com.