

HW2

1. Socket Programming - TCP

Since the server is down, I connected with another laptop under the same LAN (local area network, 192.168.____.____) and printscreen.

```
→ HW2 python3 socket_client.py
connected to 192.168.0.241
Receive server message:
Welcome to HW2 P1 Local Server. Please give me your identity. What's your name?
Christine
Receive server message:
What's your student ID?
B02901035
Receive server message:
What's your favorite food?
sashimi
Receive server message:
Hi Christine, your student id is B02901035. And you love sashimi. Is it correct? (Y/N)
y
Receive server message:
Thanks. Your response has been recorded. Please remeber to print-screen this execution, and have a nice day! (Session End)
```

2. Socket Programming - UDP

```
→ src_P2 python3 socket_client_udp.py
Sending 10000 packets to :12345
→ src_P2 █
```

a. local machine

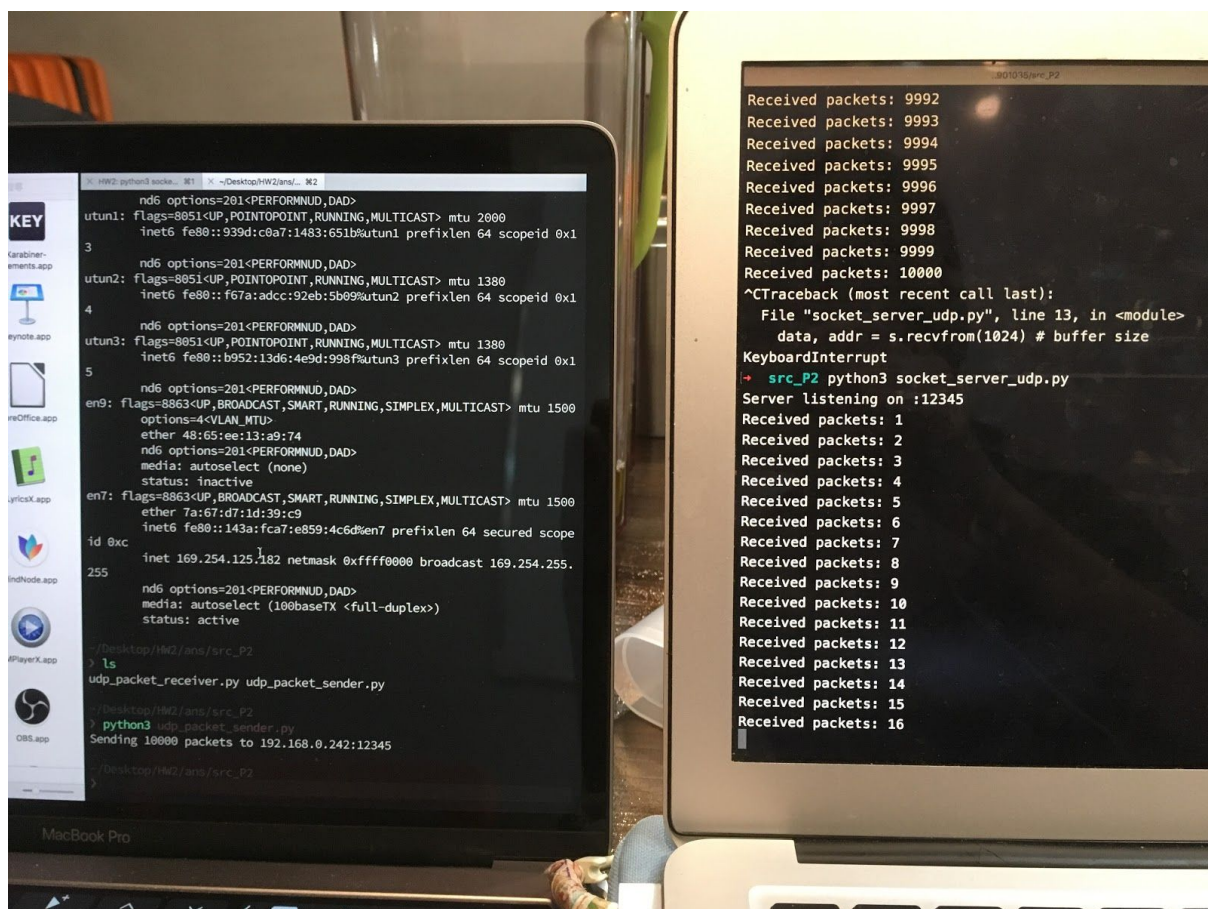
```
..901035/src_P2 python3
Received packets: 9970
Received packets: 9971
Received packets: 9972
Received packets: 9973
Received packets: 9974
Received packets: 9975
Received packets: 9976
Received packets: 9977
Received packets: 9978
Received packets: 9979
Received packets: 9980
Received packets: 9981
Received packets: 9982
Received packets: 9983
Received packets: 9984
Received packets: 9985
Received packets: 9986
Received packets: 9987
Received packets: 9988
Received packets: 9989
Received packets: 9990
Received packets: 9991
Received packets: 9992
Received packets: 9993
Received packets: 9994
Received packets: 9995
Received packets: 9996
Received packets: 9997
Received packets: 9998
Received packets: 9999
Received packets: 10000
█
```

b. different machines

```

src_P2 python3 socket_server_udp.py
Received packets: 9992
Received packets: 9993
Received packets: 9994
Received packets: 9995
Received packets: 9996
Received packets: 9997
Received packets: 9998
Received packets: 9999
Received packets: 10000
^CTraceback (most recent call last):
  File "socket_server_udp.py", line 13, in <module>
    data, addr = s.recvfrom(1024) # buffer size
KeyboardInterrupt
+ src_P2 python3 socket_server_udp.py
Server listening on :12345
Received packets: 1
Received packets: 2
Received packets: 3
Received packets: 4
Received packets: 5
Received packets: 6
Received packets: 7
Received packets: 8
Received packets: 9
Received packets: 10
Received packets: 11
Received packets: 12
Received packets: 13
Received packets: 14
Received packets: 15
Received packets: 16

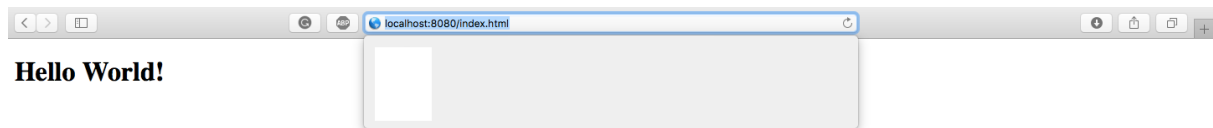
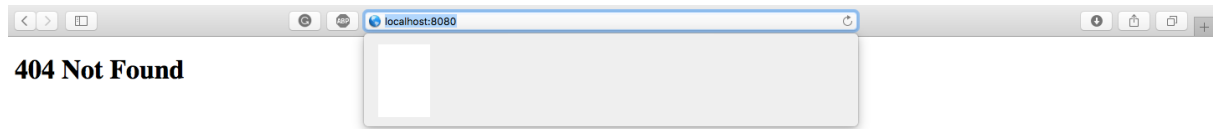
```



The wireless connection is quite poor, so only 0.16% of the packets were successfully received.

3. Web Server

a. HTTP server



```
..901035/src_P2 python3 web_server.py
Ready to serve...
Received a connection from: ('127.0.0.1', 54552)
GET / HTTP/1.1
Host: localhost:8080
Connection: keep-alive
Upgrade-Insecure-Requests: 1
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_12_6) AppleWebKit/605.1.15 (KHTML, like Gecko) Version/11.1.1 Safari/605.1.15
Accept-Language: zh-tw
DNT: 1
Accept-Encoding: gzip, deflate

/

/
File not found.
Ready to serve...
Received a connection from: ('127.0.0.1', 54553)
GET /favicon.ico HTTP/1.1
Host: localhost:8080
Accept-Encoding: gzip, deflate
Connection: keep-alive
Accept: */*
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_12_6) AppleWebKit/605.1.15 (KHTML, like Gecko) Version/11.1.1 Safari/605.1.15
Accept-Language: zh-tw
Referer: http://localhost:8080/
DNT: 1

..901035/src_P2 python3

/favicon.ico
favicon.ico
/favicon.ico
File not found.
Ready to serve...
Received a connection from: ('127.0.0.1', 54558)
GET / HTTP/1.1
Host: localhost:8080
Connection: keep-alive
Upgrade-Insecure-Requests: 1
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_12_6) AppleWebKit/605.1.15 (KHTML, like Gecko) Version/11.1.1 Safari/605.1.15
Accept-Language: zh-tw
DNT: 1
Accept-Encoding: gzip, deflate

/

/
File not found.
Ready to serve...
Received a connection from: ('127.0.0.1', 54560)
GET /index.html HTTP/1.1
Host: localhost:8080
Connection: keep-alive
Upgrade-Insecure-Requests: 1
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_12_6) AppleWebKit/605.1.15 (KHTML, like Gecko) Version/11.1.1 Safari/605.1.15
Accept-Language: zh-tw
DNT: 1
Accept-Encoding: gzip, deflate

/index.html
index.html
/index.html
Read from file
Ready to serve...

```