

CN Lab Writeup (UDP)UDP-server.py:

```
import socket
```

```
localIP = '127.0.0.1'
```

```
localPort = 20001
```

```
bufferSize = 1024
```

```
serverMsg = "Hello UDP Client!"
```

```
bytesToSend = str.encode(serverMsg)
```

```
# Create a datagram socket
```

```
UDPServerSocket = socket.socket(socket.AF_INET,  
                                socket.SOCK_DGRAM)
```

```
# Bind to address and IP
```

```
UDPServerSocket.bind(localIP, localPort)
```

```
print('The UDP server is up and listening!')
```

```
# Listen for incoming datagrams
```

```
while(True):
```

```
    byteAddressPair = UDPServerSocket.recvfrom(bufferSize)
```

```
    message = byteAddressPair[0]
```

```
    address = byteAddressPair[1]
```

```
    clientMsg = 'The message from Client: {}'.format(message)
```

```
    clientIP = 'Client IP address: {}'.format(address)
```

```
    print(clientMsg)
```

```
    print(clientIP)
```

```
    # Sending a reply to Client
```

```
    UDPServerSocket.sendto(bytesToSend, address)
```

UDP_client.py :

```
import socket
```

```
clientMsg = 'Hello UDP Server!'
```

```
bytes to Send = str.encode(clientMsg)
```

```
serverAddressPort = ('127.0.0.1', 20001)
```

```
bufferSize = 1024
```

```
# Create a UDP socket at client side
```

```
UDPClientSocket = socket.socket(socket.AF_INET,  
                                socket.SOCK_DGRAM)
```

```
# Send to server using created UDP socket
```

```
server.UDPClientSocket.sendto(bytes to Send, serverAddressPort)
```

```
serverMsg = UDPClientSocket.recvfrom(bufferSize)
```

```
msg = "The message from server: {} {}".format(serverMsg[0])
```

```
print(msg)
```