

UDP Server v1.0

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Version: 1.0

What it is: UDP Server

What it does:

- 1) Creates a Socket with certain parameters
- 2) Keeps waiting for a Message sent by a Client
- 3) Prints, to the terminal, the Client Message and IP/Port

1 - Imports and Parameters

In []:

```
import socket

#-----
#Connection Parameters:
localIP = "127.0.0.1"
port = 54321
bufferSize = 1024
#-----

msgFromServer = "Hello UDP Client" #Standard REPLY Message
bytesToSend = str.encode(msgFromServer) #Encode String to Bytes
```

2 - Create Socket and Assign Port and Address

In []:

```
# Create a Socket
UDPServerSocket = socket.socket(family=socket.AF_INET, type=socket.SOCK_DGRAM)

# Bind to Address and IP
UDPServerSocket.bind((localIP, port))

print("UDP Server READY!\n")
```

3 - Listen for incoming messages

In []:

```
while(True):

    bytesAddressPair = UDPServerSocket.recvfrom(bufferSize)

    message = bytesAddressPair[0]
    address = bytesAddressPair[1] #tuple (address, port)

    #-----
    #clientMsg = "\t> Message Received from Client:{} ".format(message)
    clientMsg = "\t> Message Received from Client: " + message.decode("utf-8")
    clientIP = "\t> Client IP Address:{} ".format(address)

    print(clientMsg)
    print(clientIP)
    print("\n")
    #-----

    # Sending a REPLY to client
    UDPServerSocket.sendto(bytesToSend, address)
```