

29/1/23

## LAB-12

### Sockets (UDP)

Using UDP sockets, write a client server program to make client sending the filename and the server to send back the contents of the request file if present.

#### Client UDP.py

```
from socket import *
ServerName = "127.0.0.1"
ServerPort = 12000
ClientSocket = socket(AF_INET, SOCK_DGRAM)
Sentence = input("\nEnter file name:")
ClientSocket.sendto(bytes(Sentence, "utf-8"), (ServerName,
ServerPort))
filecontents, serverAddress = ClientSocket.recvfrom(2048)
print("\nReply from Server:\n")
print(filecontents.decode("utf-8"))
# for i in filecontents:
#     print(str(i), end=' ')
ClientSocket.close()
ClientSocket.close()
```

#### ServerUDP.py

```
from socket import *
ServerPort = 12000
ServerSocket = socket(AF_INET, SOCK_DGRAM)
ServerSocket.bind(("127.0.0.1", ServerPort))
print("The server is ready to receive")
while 1:
    Sentence, clientAddress = ServerSocket.recvfrom(
        2048)
    Sentence = Sentence.decode("utf-8")
    file = open(Sentence, "r")
    l = file.read(2048)
    ServerSocket.sendto(bytes(l, "utf-8"),
        clientAddress)
    print("\nSend contents of", end="")
    print(Sentence)
    # for i in Sentence:
    #     print(str(i), end=' ')
    file.close()
```

Output:

Server UDP:

The server is ready to receive

Send contents of ServerUDP.py

The server is ready to receive

Client UDP:

Enter the filename: ServerUDP.py

Reply from Server:

```
from socket import *
```

```
ServerPort = 12000
```

```
ServerSocket = socket(AF_INET, SOCK_DGRAM)
```

```
ServerSocket.bind(("127.0.0.1", ServerPort))
```

```
while 1:
```

```
    print("The server is ready to receive")
```

```
    sentence, clientAddress = ServerSocket.recvfrom(2048)
```

```
    sentence = sentence.decode("utf-8")
```

```
    file = open(sentence, "w")
```

```
    l = file.read(2048)
```

```
    serverSocket.sendto(bytes(l, "utf-8"), clientAddress)
```

```
    print("\n Send contents of " + sentence)
```

```
    print(sentence)
```

```
    file.close()
```

```
>>>
```