

PROGRAM 10 : UDP SOCKET, SERVER / CLIENT

CODE

PART 1 - UDP SERVER.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, addr = serverSocket.recvfrom(2048)
    file = open(sentence, "r")
    l = file.read(2048)
    serverSocket.sendto(bytes(l, "utf-8"), addr)
    print("sent back to client", l)
    file.close()
```

CODE

PART 2 - UDP CLIENT.PY

```
from socket import *
serverName = "127.0.0.1"
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_DGRAM)
sentence = input("enter file name")
clientSocket.sendto(bytes(sentence, "utf-8"),
                    (serverName, serverPort))
fileContents, addr = clientSocket.recvfrom(2048)
print("From server :", fileContents)
clientSocket.close()
```

```

buffer = Buffer(1024)
client = Client(1024)
data_to_send = ""

```

```

while True:
    data_to_send = input("Enter a string")
    count = 0
    if buffer.checkstate():
        for i in range(0, len(data_to_send)):
            if i < client.state:
                client.data.append(data_to_send[i])
            else:
                if count < buffer.buffer_size:
                    buffer.buffer.append(data_to_send[i])
                    count = len(buffer.buffer)
                else:
                    print("Data loss" + data_to_send[i])
            else:
                i = 0
                for i in range(0, len(data_to_send), +
                    len(buffer.buffer)):
                    if i < client.state:
                        if len(buffer.buffer):
                            client.data.append(buffer.buffer[i])
                            del buffer.buffer[i]
                        else:
                            client.data.append(data_to_send[i])
                            i += 1
                    else:
                        pass

```

min_index = V
return min_index

def dijkstra (self, src) :

dist = [sys.maxsize] * self.V

dist[src] = 0

sptSet = [False] * self.V

for cout in range (self.V) :

u = self.minDistance (dist, sptSet)

sptSet[u] = True

for v in range (self.V) :

if self.graph[u][v] > 0 and

sptSet[v] == False and

dist[v] > dist[u] + self.graph[u][v] :

dist[v] = dist[u] + self.graph[u][v]

self.printSolution (dist)