NIHA
USN: 1BM18CS060

LAB-10

papergrid
Date: / /

I. Socket programming using TCP:-

1. Server.py

```
from socket import *
serverName = 'my-pc'
serverPort = 12001
serverSocket = socket(AF_INET, SOCK_STREAM)
serverSocket.bind((serverName, serverPort))
serverSocket.listen(1)
print('The server is ready to receive')
while 1:
    connectionSocket, addr = serverSocket.accept()
    sentence = connectionSocket.recv(1024).decode()

    file = open(sentence, 'r')
    l = file.read(1024)

    connectionSocket.send(l.encode())
    file.close()
    connectionSocket.close()
```

2. Client.py

```
from Socket import *
serverName = 'my-pc'
serverPort = 12001
clientSocket = socket(AF_INET, SOCK_STREAM)
clientSocket.connect((serverName, serverPort))
sentence = input("Enter file name")
```

```
clientSocket.send(sentence.encode())
fileContents = clientSocket.recv(1024).decode()
print('From Server:', fileContents)
clientSocket.close()
```

II Socket programming using UDP:-

1. userver.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)
    file = read(2048)
    serverSocket.sendto(bytes(f, "utf-8"), clientAddress
    print('sent back to client',1)
file.close()
```

2. uclient.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, serverAddress = clientSocket.recvfrom(2048)
print('from server:', fileContents)
clientSocket.close()
```