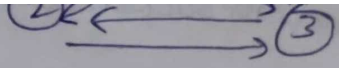
Path = 2 ← 1



Distance of 3 = 2

Path = 3 ← 0 ← 1

11) Using TCP/IP sockets, write client server Prgm to make client sending filename and servers to send back contents of requested file if present

Sol:- client.py

```
from socket import *
servername = '127.0.0.1'
serverport = 12000

clientSocket = socket(AF_INET, SOCK_STREAM)
clientSocket.connect((serverName, serverport))
sentence = input("\n Enter filename: ")
clientSocket.send(sentence.encode())
fileContents = clientSocket.recv(1024).decode()
print('\n From Server: \n')
Print(fileContents)
clientSocket.close()
```

Server.py

```
from Socket import *
servername = "127.0.0.1"
serverport = 12000
ServerSocket = socket(AF_INET, SOCK_STREAM)
serverSocket.bind((servername, serverport))
```

```
serverSocket.listen(1)
while 1:
    Print("server is ready to receive")
    ConnectionSocket, addr = serverSocket.accept()
    Sentence = connectionSocket.recv(1024).decode()
    file = open(sentence, "r")
    l = file.read(1024)
    ConnectionSocket.send(l.encode())
    Print('In Sent contents of ' + sentence)
    file.close()
    ConnectionSocket.close()
```

O/P :

```
Enter filename: serverTCP.py
From Server:
ConnectionSocket, addr = serverSocket.accept()
Sentence = connectionSocket.recv(1024).decode()
file = open(sentence, "r")
l = file.read(1024)
ConnectionSocket.send(l.encode())
Print('In Sent contents of ' + sentence)
file.close()
ConnectionSocket.close()

server is ready to receive
Sent contents of serverTCP.py
```