**SRM Institute of Science & Engineering- Kattankulathur Campus**

**School of Computing**

**B.Tech- 3rd Year**

**Date:**1st Dec 2020

**Question:** Alice has prepared a document for a building construction from system 1 in LAN 2. She wants to share the document to the site engineer, who is in system 32 in LAN 4. The communication should be a reliable data deliver. Write a code to help Alice for sharing the file over a reliable communication**.**

**Aim:** To use File Transfer Protocol and transfer files between two computers.

**Procedure:**

Server:

1. Import the required libraries for the program.

2. Initialize the socket socket method.

3. Bind the socket to to the client’s IP address and select the port number.

4. Search for the client with same port number and accept the connection from the client

5. After connecting to the client receive the required files.

6. After all the files have been received close the connection with the client

Client:

1. Import the required libraries for the program

2. Initialize the socket socket method.

3. Bind the socket to the server using the same port number,

4. Wait for the confirmation from the server.

5. Enter the Filename you want to send, and send the files.

6. Once the required files are sent close the connection with the server

**Program Code:**

**SERVER:**

import socket

s = socket.socket()

PORT = 9898

print("Server ready :", PORT, "\n")

s.bind(('127.0.0.1', PORT))

s.listen(10)

file = open("recv.txt", "ab+")

while True:

conn, addr = s.accept()

msg = "---|\n Hi Client[IP address: " + addr[0] + "],|------|\n \n\n"

conn.send(msg.encode())

RecvData = conn.recv(1024)

while RecvData:

file.write(b"\n")

file.write(RecvData)

RecvData = conn.recv(1024)

file.close()

print("File has been copied successfully.\n")

conn.close()

print("Server closed the connection!\n")

print("The content of the file is:-\n")

f = open("recv.txt", "r")

print(f.read())

break

**CLIENT:**

import socket

import sys

s = socket.socket()

PORT = 9898

s.connect(('127.0.0.1', PORT))

filename = str(input("Enter The File you want to transfer :: "))

file = open(filename, "rb")

SendData = file.read(1024)

while SendData:

print("\nAcknowledgement from Server\n ",

s.recv(1024).decode("utf-8"))

s.send(SendData)

SendData = file.read(1024)

s.close()

**Output Screenshots:**

**SERVER OUTPUT:**

**CLIENT OUTPUT:**

**Result:** The Transfer of Files between two computers using File Transfer Protocol has been successfully implemented.