

COMPUTER NETWORKS LAB ASSIGNMENT-8(CS-613)

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Q. Write a client- server program using Socket to transfer file between client and server.

The Client Program.

# Pranit De, CSE/16161

import socket

import sys

EOF = *b*'\0'

*def* client\_program():

host = socket.gethostname()

port = 5000

client\_socket = socket.socket()

client\_socket.connect((host, port))

while True:

fileName = input(

"Enter the filename to be sent (1 to skip, 0 to exit)")

if(fileName == 1):

print("Exiting Client")

client\_socket.close()

sys.exit(0)

if(fileName == 0):

continue

# Send the file

client\_socket.send(fileName.encode())

with open(fileName, 'rb') as f:

data = f.read(1024)

print('data', data)

while data:

client\_socket.send(data)

data = f.read()

print('data', data)

client\_socket.send(EOF)

print("Waiting for server")

fileName = client\_socket.recv(1024).decode()

with open('received\_from\_server\_' + fileName, 'wb') as f:

while True:

data = client\_socket.recv(1024)

if data == EOF:

print(fileName, ' Recieved!')

f.close()

break

f.write(data)

if \_\_name\_\_ == '\_\_main\_\_':

client\_program()

The Server program

import socket

import sys

EOF = *b*'\0'

*def* server\_program():

host = socket.gethostname()

port = 5000

server\_socket = socket.socket()

server\_socket.bind((host, port))

server\_socket.listen(2)

print("Waiting for clients!")

connection, address = server\_socket.accept()

print("Connection from: " + *str*(address))

while True:

print("Waiting to receive a file")

fileName = connection.recv(1024).decode()

f = open('received\_from\_client\_' + fileName, 'wb')

while True:

print("Waiting to recieve")

data = connection.recv(1024)

print("Running server...")

print("data", data)

if data == EOF:

f.close()

print(fileName, ' Recieved!')

break

f.write(data)

print("Reached here...")

fileName = input(

"Enter the filename to be sent (1 to skip, 0 to exit)")

if(fileName == 1):

print("Exiting Server")

connection.close()

sys.exit(0)

if(fileName == 0):

continue

# Send the file

connection.send(fileName.encode())

with open(fileName, 'rb') as f:

data = f.read(1024)

while data:

connection.send(data)

data = f.read()

f.close()

connection.send(EOF)

if \_\_name\_\_ == '\_\_main\_\_':

server\_program()