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**SUBJECT :** CN

**CLASS :** TE

**BRANCH :** AI&DS

**EXPERIMENT NO :6**

**TITLE :**

**Write a program using TCP socket for wired network for following**

**a. Say Hello to Each other.**

**b. File transfer.**

**CODE:**

**a. Say Hello to Each other.**

**@server.py**

**import socket**

**HOST = '127.0.0.1' # Standard loopback interface address (localhost)**

**PORT = 3333**

**with socket.socket(socket.AF\_INET, socket.SOCK\_STREAM) as s:**

**s.bind((HOST, PORT))**

**s.listen()**

**conn, addr = s.accept()**

**with conn:**

**print('Connected by', addr)**

**while True:**

**data = conn.recv(1024).decode()**

**print('Client says:', data)**

**if data == 'stop':**

**break**

**str2 = input("Enter your message: ")**

**conn.sendall(str2.encode())**

**@client.py**

**import socket**

**HOST = '127.0.0.1' # The server's hostname or IP address**

**PORT = 3333**

**with socket.socket(socket.AF\_INET, socket.SOCK\_STREAM) as s:**

**s.connect((HOST, PORT))**

**while True:**

**message = input("Enter your message: ")**

**s.sendall(message.encode())**

**if message == 'stop':**

**break**

**data = s.recv(1024).decode()**

**print('Server says:', data)**

**b. File transfer.**

**@Server.py**

**import socket**

**host = "127.0.0.1"**

**port = 12000**

**sock = socket.socket(socket.AF\_INET, socket.SOCK\_DGRAM)**

**sock.bind((host,port))**

**f= open('Myfile2.txt','wb')**

**print('New file created')**

**data, addr = sock.recvfrom(1024)**

**while(data):**

**print(data)**

**if data.decode("utf-8")=="Now":**

**break**

**f.write(data)**

**data, addr = sock.recvfrom(1024)**

**print('File is successfully received!!!')**

**f.close()**

**f = open('Myfile2.txt','r')**

**print(f.read)**

**f.close()**

**sock.close()**

**print('Connection closed!')**

**@client.py**

**import socket**

**host = "127.0.0.1"**

**port = 12000**

**buffer\_size = 1024**

**file\_name = 'Myfile.txt'**

**sock = socket.socket(socket.AF\_INET, socket.SOCK\_DGRAM)**

**f = open("Myfile.txt", "r")**

**data = f.read(buffer\_size)**

**while data:**

**print(data)**

**if(sock.sendto(str.encode(data), (host, port))):**

**data = f.read(buffer\_size)**

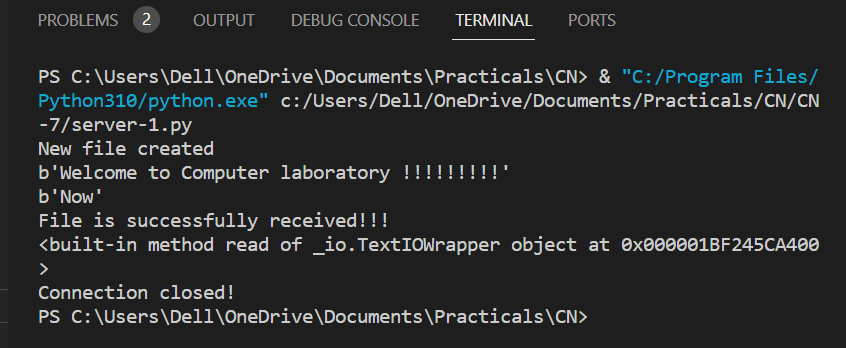
**sock.sendto(str.encode("Now"),(host, port))**

**sock.close()**

**f.close()**

**OUTPUT:**

**b. File transfer.**

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