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Socket programming

LAB 7

**ftp:**

**server side code:**

import socket  
  
IP = socket.gethostbyname(socket.gethostname())  
PORT = 4455  
ADDR = (IP, PORT)  
SIZE = 1024  
FORMAT = "utf-8"  
  
def main():  
 print("server is starting")  
 """ establishing a tcp. """  
 server = socket.socket(socket.AF\_INET, socket.SOCK\_STREAM)  
  
 """ assigning ip and port numbere. """  
 server.bind(ADDR)  
  
 """ Server is listening and waiting for the client to be connected """  
 server.listen()  
 print("server is listening ")  
  
 while True:  
 """ Server has accepted the connection from the client. """  
 conn, addr = server.accept()  
 print(f" {addr} connected.")  
 """ reciving file name from client """  
 filename = conn.recv(SIZE).decode(FORMAT)  
 print(f"reciving from client .")  
 file = open(filename, "w")  
 conn.send("file received.".encode(FORMAT))  
  
 """ receving from data from client. """  
 data = conn.recv(SIZE).decode(FORMAT)  
 print(f"[RECV] receving the data from file")  
 file.write(data)  
 conn.send("File data received".encode(FORMAT))  
  
  
  
  
 """ Closing connection """  
 conn.close()  
 print(f"[DISCONNECTED] {addr} disconnected.")

if \_\_name\_\_ == "\_\_main\_\_":  
 main()

client side code:

import socket  
  
IP = socket.gethostbyname(socket.gethostname())  
PORT = 4455  
ADDR = (IP, PORT)  
FORMAT = "utf-8"  
SIZE = 1024  
  
def main():  
 *""" staring a tcp connection """* client = socket.socket(socket.AF\_INET, socket.SOCK\_STREAM)  
  
 """ wait-connecting to server """  
 client.connect(ADDR)  
  
  
 file = open("hello.txt", "r")  
 data = file.read()  
  
  
 client.send("hello.txt".encode(FORMAT))  
 msg = client.recv(SIZE).decode(FORMAT)  
 print(f"[SERVER]: {msg}")  
  
  
 client.send(data.encode(FORMAT))  
 msg = client.recv(SIZE).decode(FORMAT)  
 print(f"[SERVER]: {msg}")  
  
  
  
  
 client.close()  
  
  
if \_\_name\_\_ == "\_\_main\_\_":  
 main()





