pert 5 > client.py > ...

```python
import socket
import os

SERVER_HOST = "127.0.0.1"
SERVER_PORT = 6000
BUFFER_SIZE = 4096


def receive_file(conn, filename):
    with open(filename, 'wb') as f:
        while True:
            data = conn.recv(BUFFER_SIZE)
            if not data:
                break
            f.write(data)
    conn.close()
```

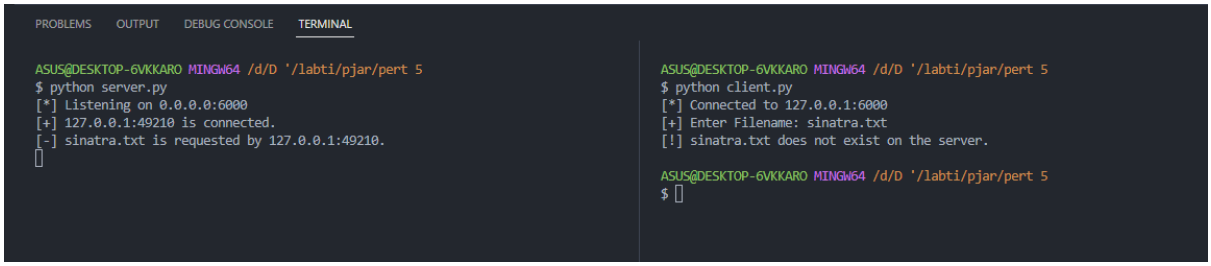
pert 5 > client.py > ...

```python

def main():
    client_socket = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
    client_socket.connect((SERVER_HOST, SERVER_PORT))
    print(f"[*] Connected to {SERVER_HOST}:{SERVER_PORT}")
    filename = input("[+] Enter Filename: ")
    client_socket.send(filename.encode())
    response = client_socket.recv(BUFFER_SIZE).decode()
    if response == "OK":
        filesize = int(client_socket.recv(BUFFER_SIZE).decode())
        print(f"[-] File Size:{filesize} bytes. ")
        client_socket.send(b"OK")
        receive_file(client_socket, filename)
        print(f"[-] {filename} received succesfully. ")
    else:
        print(f"[!] {filename} does not exist on the server.")
    client_socket.close()


if __name__ == "__main__":
    main()

```

pert 5 > server.py > ...

```python
import socket
import os
import threading

SERVER_HOST = "0.0.0.0"
SERVER_PORT = 6000
BUFFER_SIZE = 4096


def send_file(conn, addr, filename):
    filesize = os.path.getsize(filename)
    conn.send(str(filesize).encode())
    response = conn.recv(BUFFER_SIZE)
    if response == b"OK":
        with open(filename, "rb") as f:
            data = f.read(BUFFER_SIZE)
            while data:
                conn.send(data)
                data = f.read(BUFFER_SIZE)
    conn.close()

```

```python
def wait_for_connection(server_socket):
    while True:
        conn, addr = server_socket.accept()
        print(f"[+] {addr[0]}:{addr[1]} is connected. ")
        filename = conn.recv(BUFFER_SIZE).decode()
        print(f"[-] {filename} is requested by {addr[0]}:{addr[1]}.")
        if os.path.exists(filename):
            conn.send(b"OK")
            t = threading.Thread(target=send_file, args=(conn, addr, filename))
            t.start()
        else:
            conn.send
            conn.close()


def main():
    server_socket = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
    server_socket.setsockopt(socket.SOL_SOCKET, socket.SO_REUSEADDR, 1)
    server_socket.bind((SERVER_HOST, SERVER_PORT))
    server_socket.listen(5)
    print(f"[*] Listening on {SERVER_HOST}:{SERVER_PORT}")
    wait_for_connection(server_socket)


if __name__ == "__main__":
    main()

```


PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
ASUS@DESKTOP-6VKKARO MINGW64 /d/D '/labti/pjar/pert 5
$ python server.py
[*] Listening on 0.0.0.0:6000
[+] 127.0.0.1:49210 is connected.
[-] sinatra.txt is requested by 127.0.0.1:49210.
ASUS@DESKTOP-6VKKARO MINGW64 /d/D '/labti/pjar/pert 5
$ python client.py
[*] Connected to 127.0.0.1:6000
[+] Enter Filename: sinatra.txt
[!] sinatra.txt does not exist on the server.
ASUS@DESKTOP-6VKKARO MINGW64 /d/D '/labti/pjar/pert 5
$