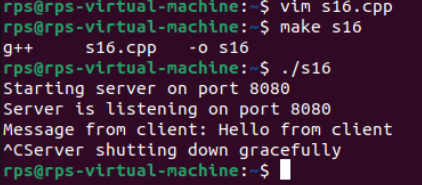
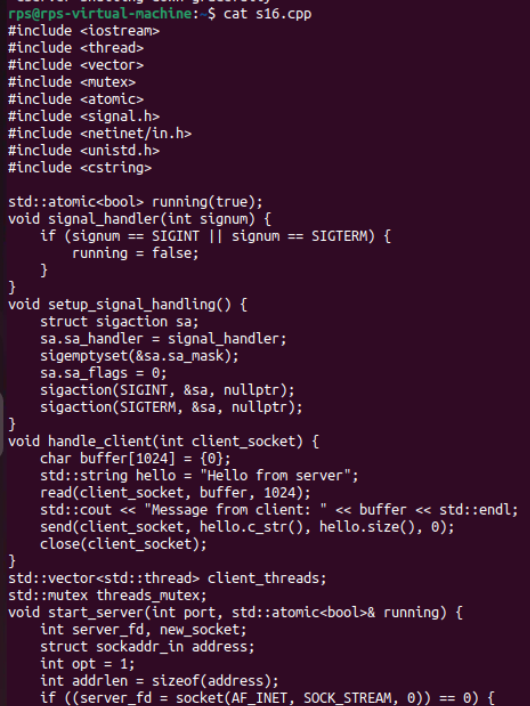
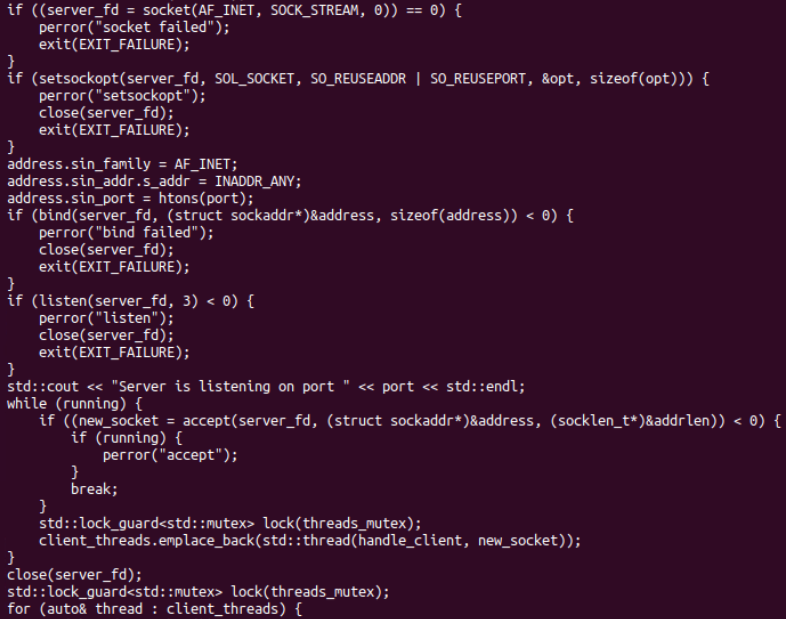
**Design and implement a network service that reliably handles concurrent client connections while ensuring graceful termination in response to external signals (e.g., SIGTERM, SIGINT). The service must maintain data consistency and avoid resource leaks throughout its lifecycle.**

**Server:**

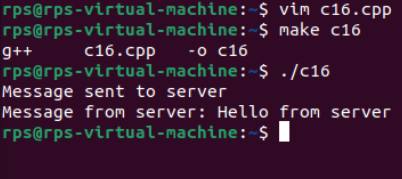


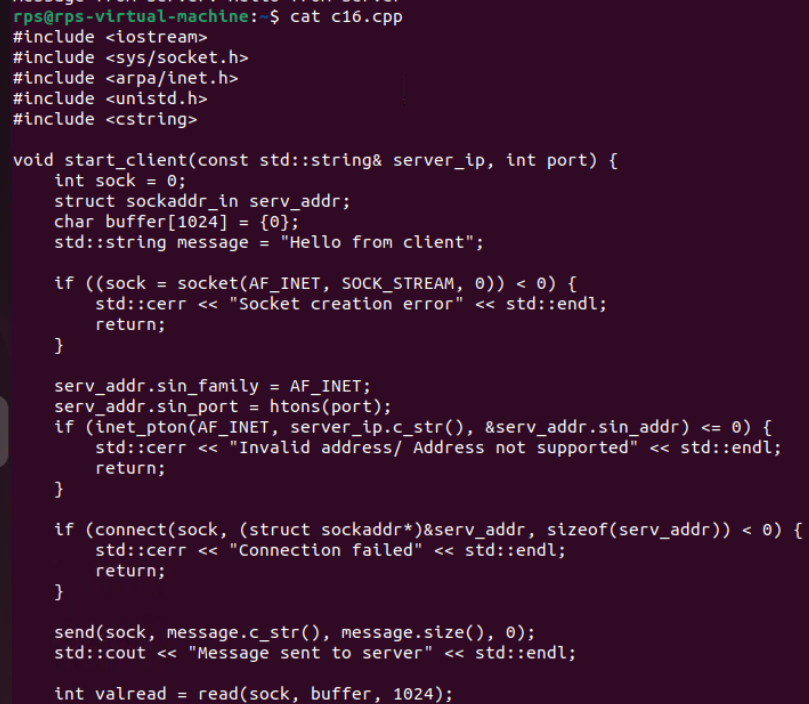






**Client:**

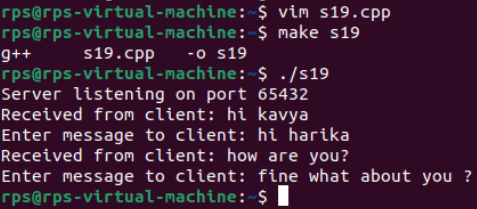


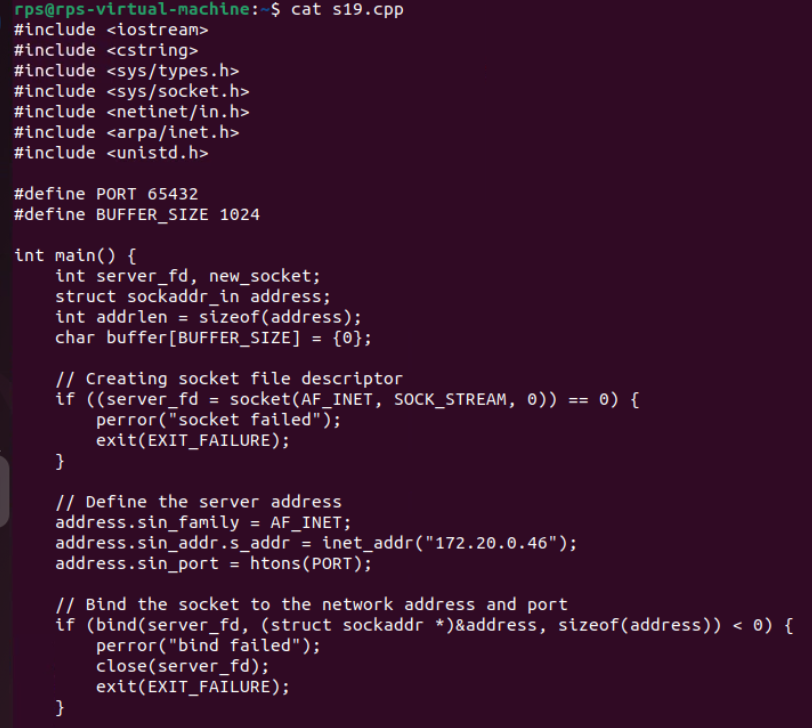


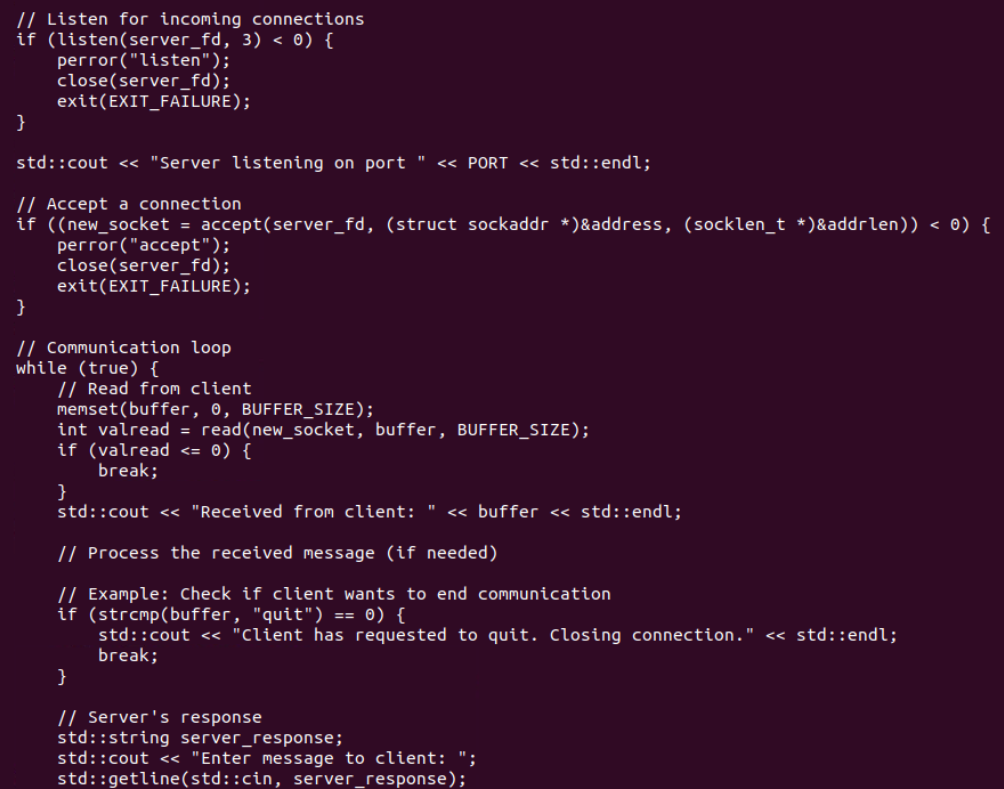


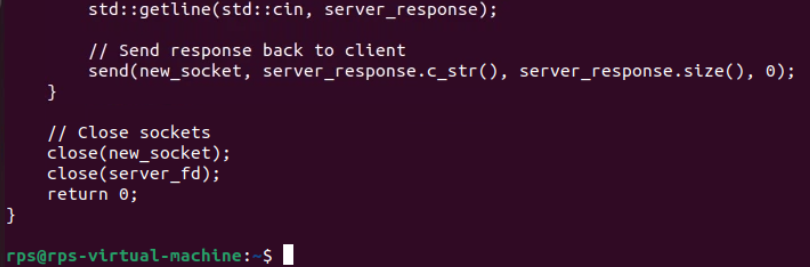
**Connecting two system as a client and server:**

**Server:**

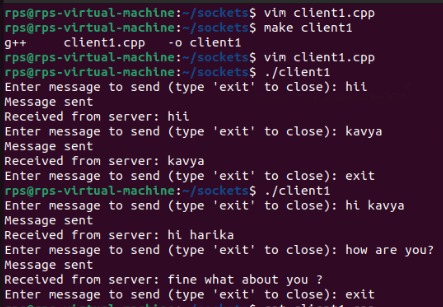
****

****

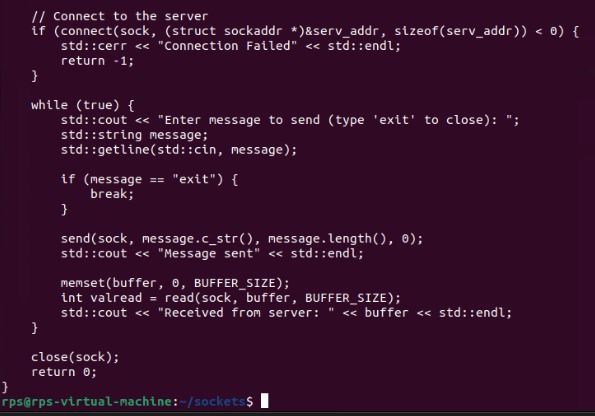
****

****

**Client:**

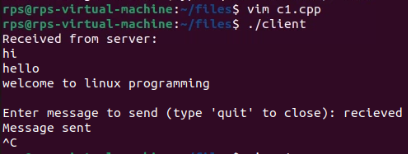
****

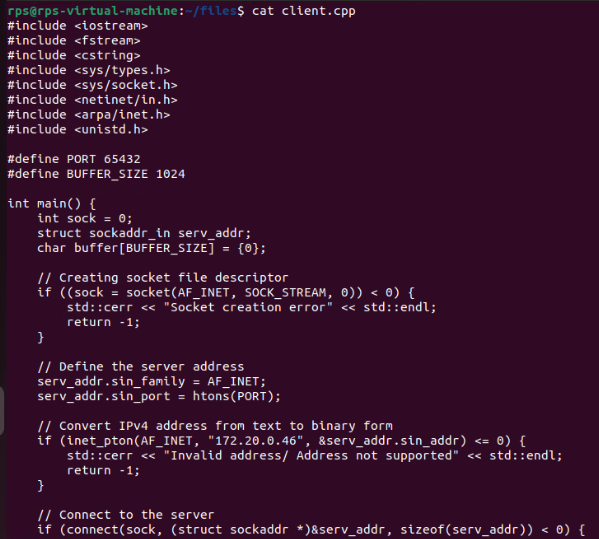
****

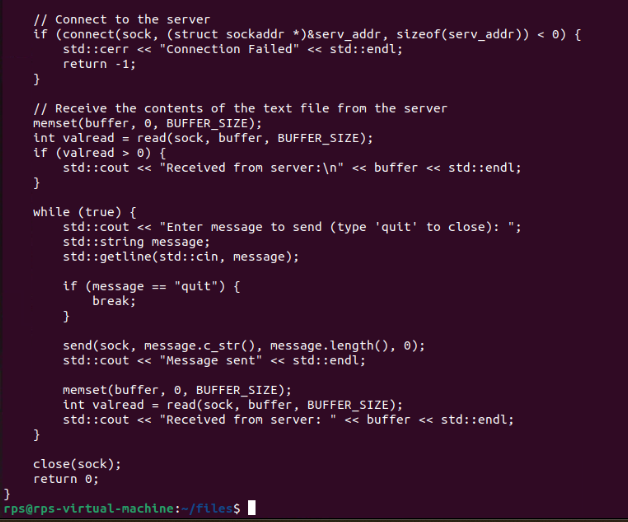
****

**Create a text file and then send from the server to client and vice versa.**

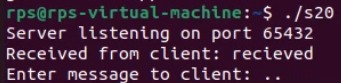
**Server-Client : Client**

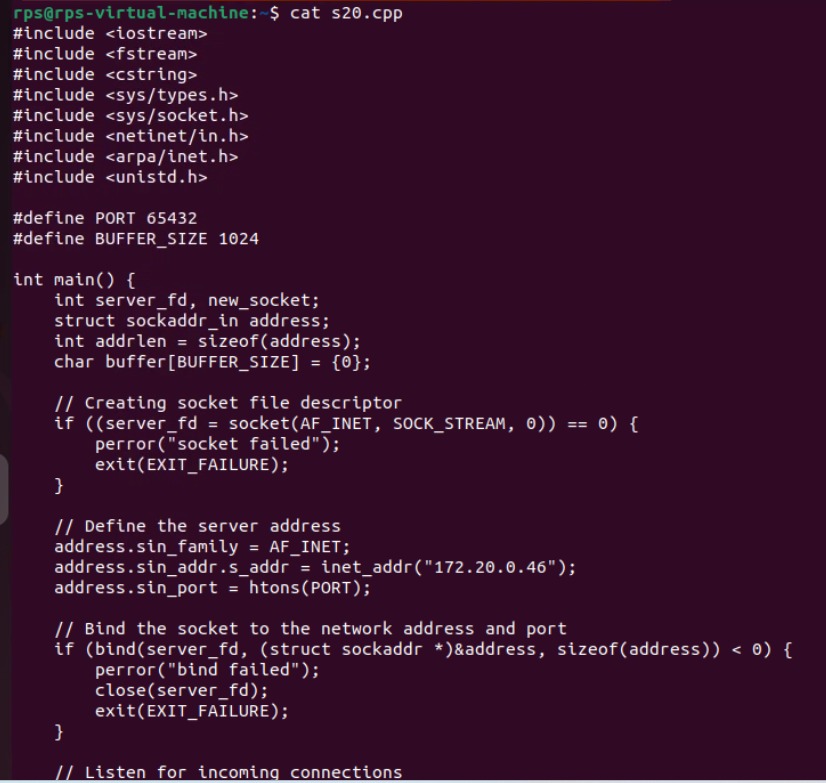


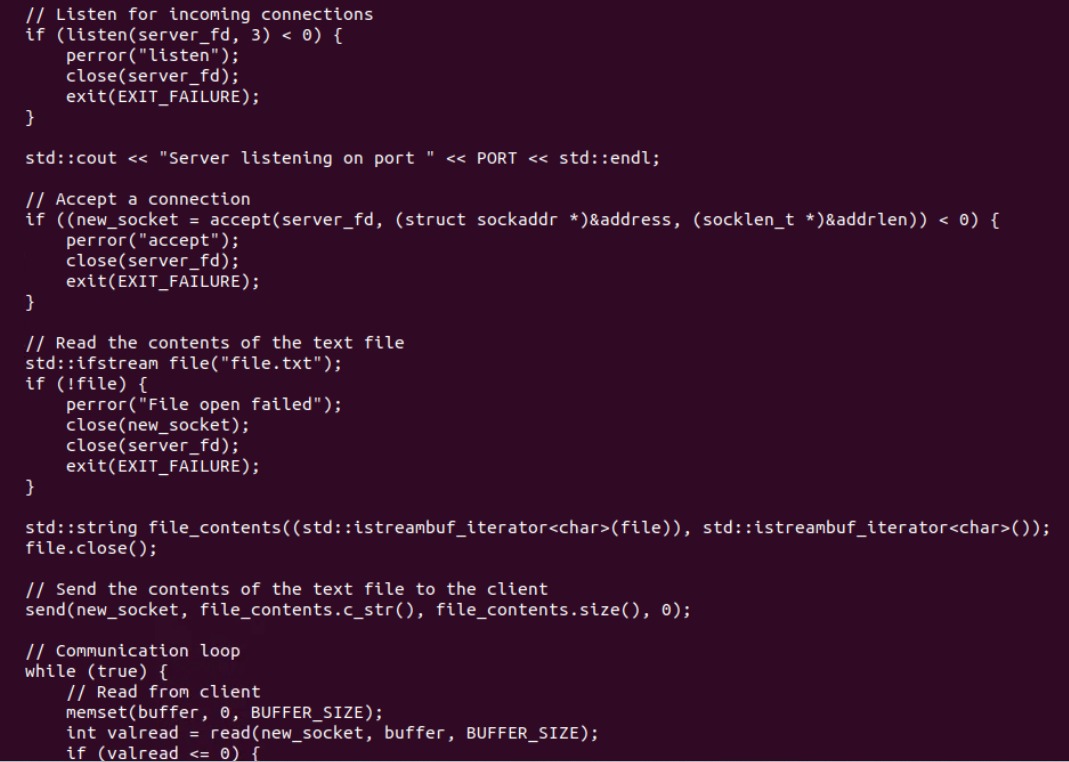


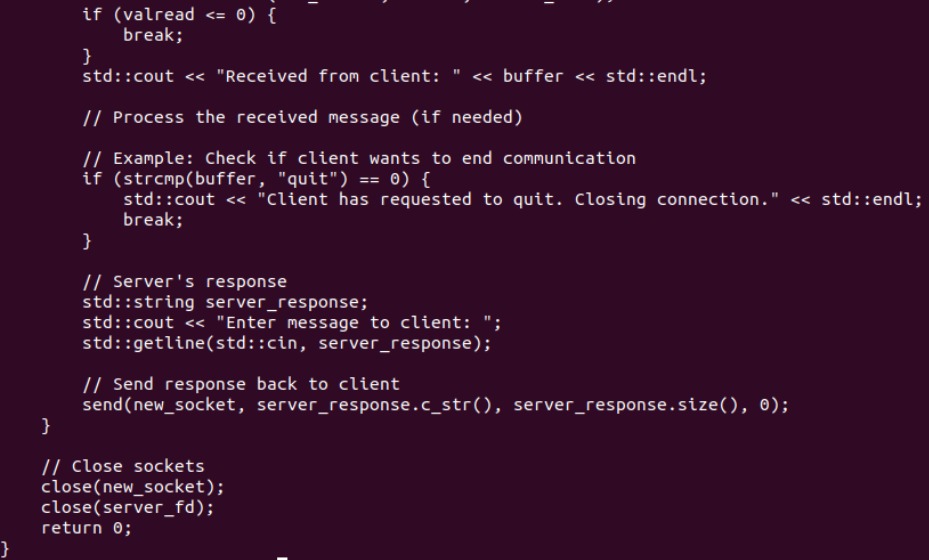


**Server: Same code when client transferred file to server.**









**Server – Client:**

**Client**

