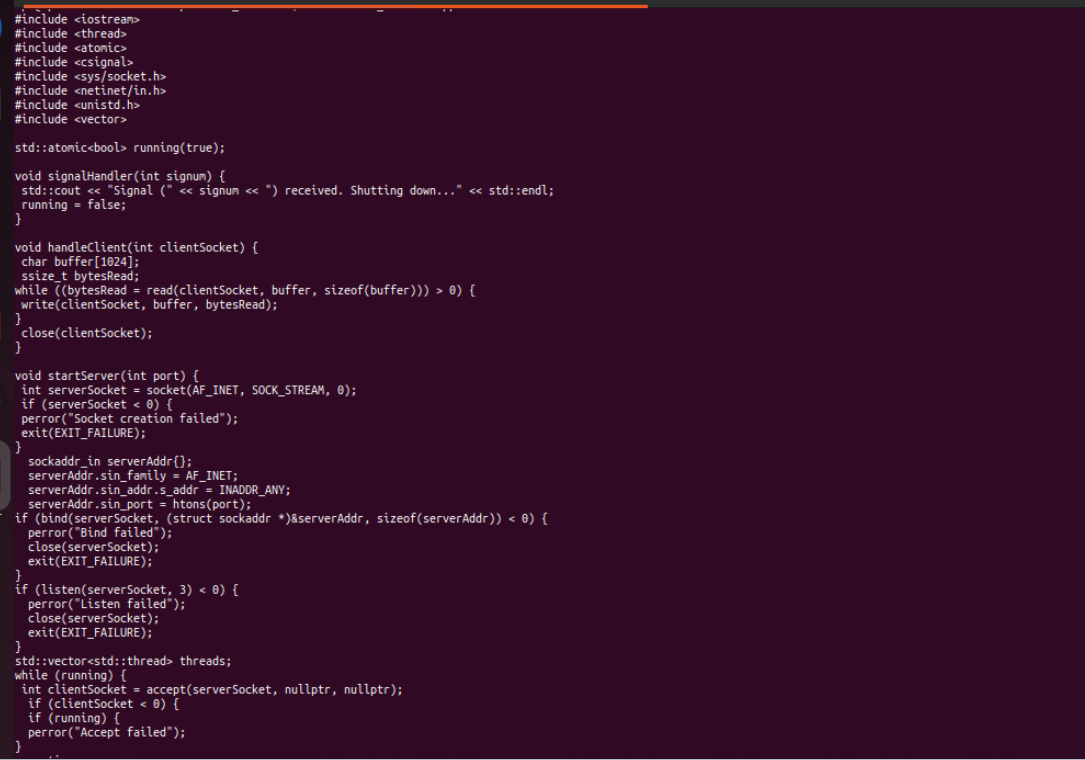
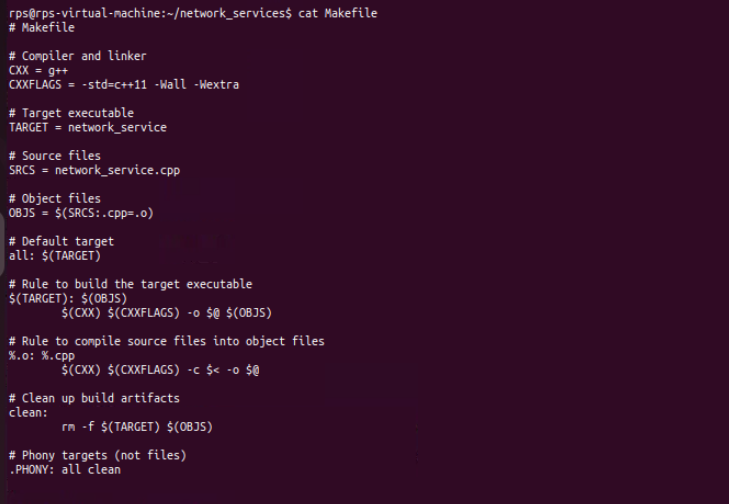
Design and implement a network service that reliably handles concurrent client connections while ensuring graceful termination in response to external signals (e.g., SIGTERM, SIGINT). The service must maintain data consistency and avoid resource leaks throughout its lifecycle.

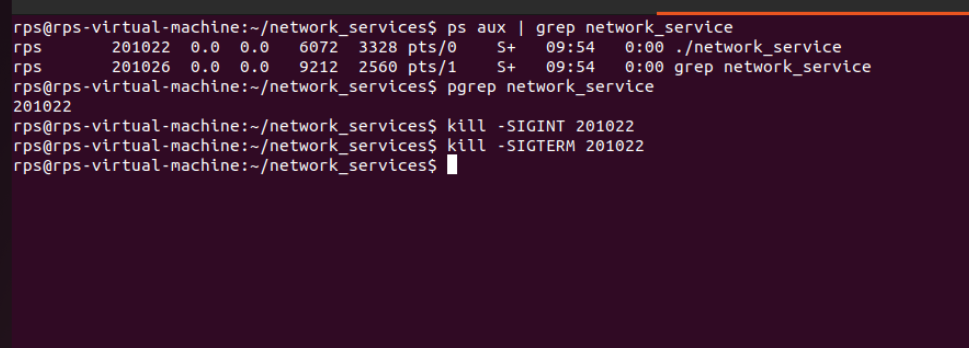




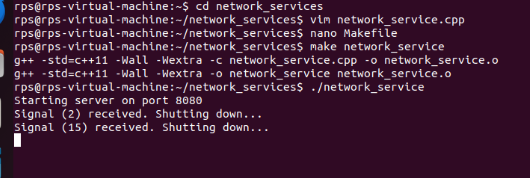
Makefile



Run:

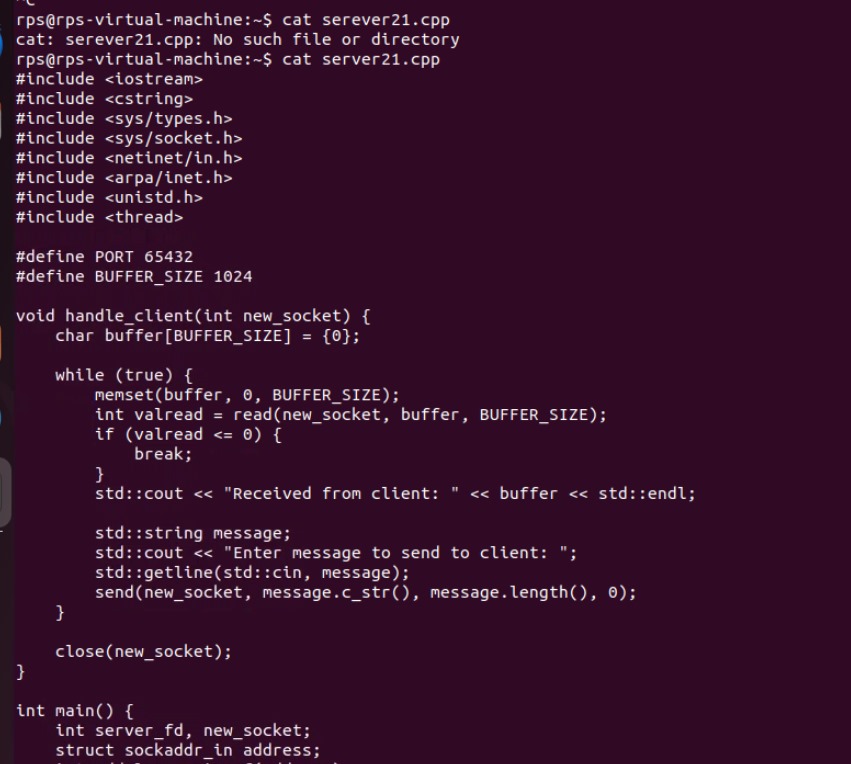


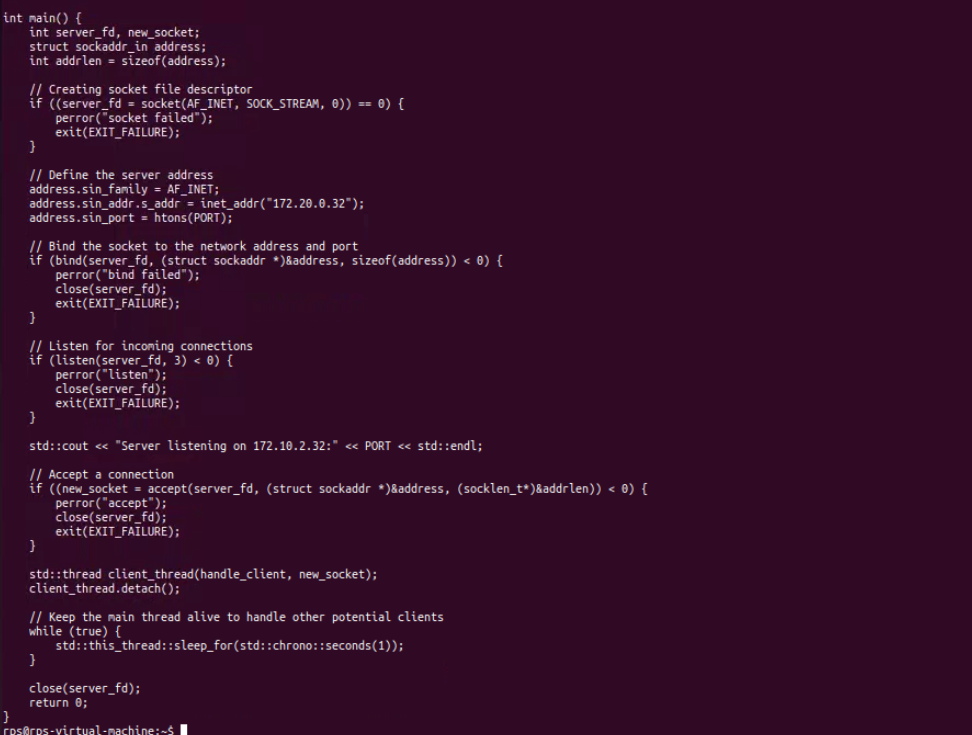
In another terminal



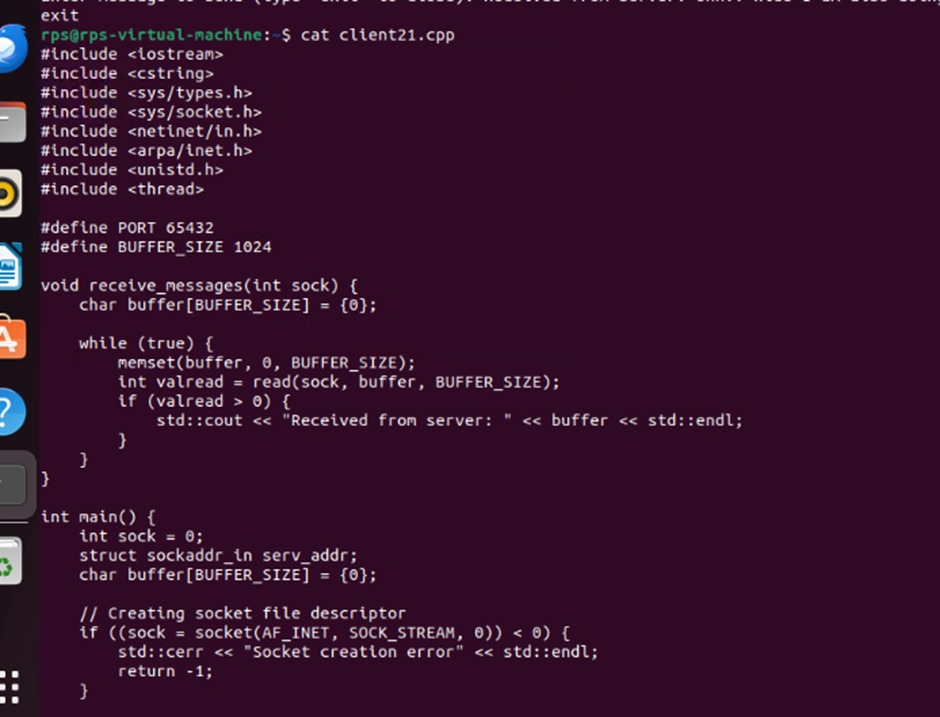
Chat with server and client:

Server





Client side code





Outputs:



Task:

