

## Problem Statement

Create a simulated network controller for a local area network. The network will have six ports. Create sockets for each port.

Your program will receive four types of input: a process ID and IP destination address (for process initiation), a flag denoting process completion and the process ID, a signal that a port is down with the address of that port, and a signal that the port is restored.

When you receive an initialized process, bind it to the appropriate socket. When the process completes, remove it. If a port goes down, trigger interrupts for each process on that port, as they must be suspended until the port is restored. When the port is restored, trigger interrupts to reactivate the processes.

At least three times during your simulation, list the status of the six ports (whether that are up or down) and list the process IDs of all process bound to each port.

Should compile on gcc and borland turbo c