TP 14 : Network

1 Netowrk implementation of the ring leader election protocol

You can look at the last exercice sheet for details about the ring leader election protocol. The network version of the program, `ring-net.c` instantiates a single node per run. You can copy the `protocol` function of your own `ring-pipe.c` The program takes 3 arguments : the port listening node, the name of the neighbor node (machine name), the connection port to the neighbor node.

The program creates a server in a thread and waits for a neighbor to connect. In parallel, in a another thread, it tries a connection on its neighbor (machine name and port passed as argument).

— Write a script that implements the execution of your code on 5 machines in the department. Start by testing the execution of your code locally (localhost machine using different ports). Gradually expand the size of the ring.

— Create a ring with your neighbors and extend it to the whole lab room.

2 Chat

We want to create an application to chat with each other on the terminal. So we need a program that can both receive and send messages. To do this, we'll either create two threads, or two processes. One will act as a server, the other as a client. You can use the functions available in the files packets.c and packets.h.

How can I receive messages from several people and send messages to several people ? Implement.