Instruction

A. How to run the program

This program needs three different terminals to run since the mouse should listen the nc port and listy should occupied on node and cordy needs to dispatch Catty and Jazzy.

1. Open a terminal to run the mouse.sh
2. Open a terminal to run the listy.sh
3. Open a terminal to run the cordy.sh

B. Logic processing

1. The mouse is running on one node of ukko nodes and listen to nc port with the message ”MEOW”
2. The cordy distributes Jazzy and Catty to searching the mouse via command S (searching).

To achieve this goal, the project has designed as Catty will search each single node and Jazzy will search each even node. In this way, they are in “parallel” to search the mouse.

3. The cordy will communicate with Catty and Jazzy via listy
4. When Jazzy or Catty realize there is no mouse on node, they will send N message to listy and listy will record this to csmg.

However when Jazzy or Catty found a mouse on one node, they will send F message to listy and listy will record this csmg.

5. When cordy know there is one F message appear on the csmg, it will send A message to the different cat which is not the F message sender.
6. When the cat recive the A messge, it will send ”MEOW” to the mouse
7. The mouse will send SIGINT message back
8. The cat will send G message to the listy, and listy will record to csmg

Finally if follow the whole logic processing, the csmg may like:

N ukko021 Catty
N ukko022 Jazzy
N ukko023 Catty
N ukko024 Jazzy
N ukko025 Catty

N ukko026 Jazzy

N ukko027 Catty

N ukko028 Jazzy

F ukko029 Catty

F ukko029 Jazzy

G ukko029 Catty