Operating Systems
CSC 341/641

Implement Ricart and Agrawala's algorithm for mutual exclusion in computer networks with the following specifications:

-the critical section (CS) is a print server process.
    -displays lines as received by a node process

-communication among nodes and CS process is done through the network

-nodes know the number of processes that are competing for the use of the CS

-nodes execute identical code and there must be at least 4 nodes running, and each execute with the command line:

```
%node i  // where  i  is the node number
```

-nodes send a "header" line:

    ########## START OUTPUT FOR NODE i ################

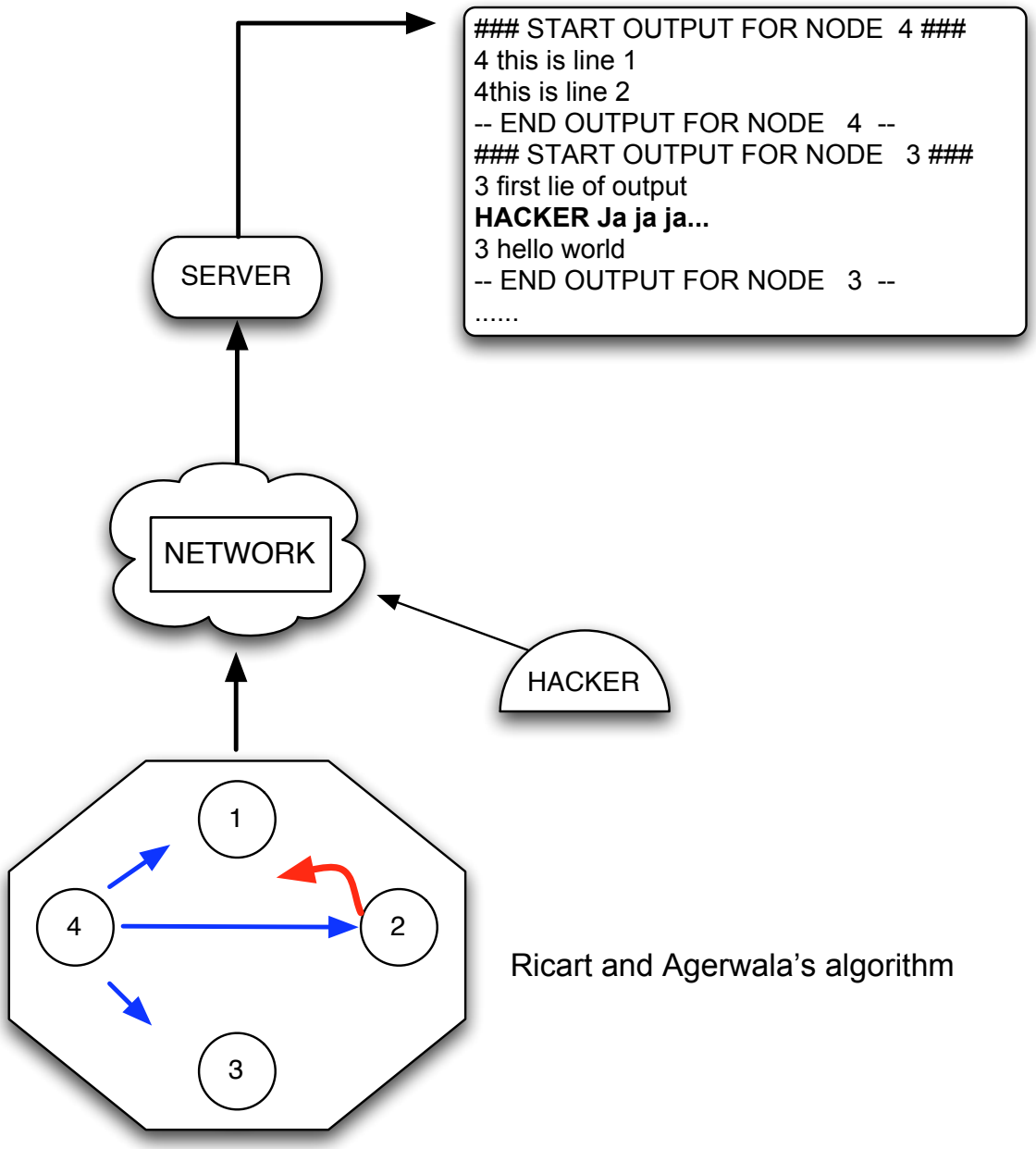
then it sends one line at a time to the network, so if "N" lines must be printed, N messages must be sent. Each line must be preceded by the node number.

and finally a "footer line":

    ---------- END OUTPUT FOR NODE i ----------

create a "Hacker" node which does not participate in the algorithm but uses the CS

extra credit:
-accept new nodes
-timeout for failing nodes



Ricart and Agerwala's algorithm