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CS 425

Report

language : python

For running the program,

You need to type "python mp3.py cs_int nex_req tot_exec_time <option>"

ex) python mp3.py 10 10 100

Also, if option is 1, it will print the log

ex) python mp3.py 10 10 100 1

I used Maekawa's algorithm in our text book.

All nodes have their own voting set

For the deadlock, I am using deadlock prevention

When a thread request the voting, the thread put its id to its voting threads request queue, then the voting thread check their queue. When the program start, the node 0 to 9 send the request for entering cs. Then, start with node 0, node 0 asks to its voting set to enter the cs. Then, it enters to cs. After that, node 1 asks for entering the cs to its voting set. By this mechanism, all nodes can enter the cs at fixed time, so the deadlock does not occur. Other thread cannot enter the cs before one node finish its voting. So, the node can enter cs one by one.