Assignment 7

Operating System Lab (CS341)
Department of CSE, IIT Patna

Date:- 5-Mar-2018   **Time:-** 3 hours

Instructions:

1. All the assignments of part-I should be completed by 5 pm.
2. All the assignments of part-II should be completed and uploaded by 11:59 pm, 11/03/2018. Marks will be deducted for late submission.
3. Markings will be based on the correctness and soundness of the outputs. Marks will be deducted in case of plagiarism.
4. Proper indentation and appropriate comments are mandatory.
5. You should zip all the required files and name the zip file as   *roll_no*.**zip**, eg. **1501cs11.zip.**
6. Upload your assignment (**the zip file**) in the following link:
   PART 2: https://www.dropbox.com/request/PCP2YBXXT5g5JHcafR6w

Part - I
Deadline:- 5-March-2018; 5:00 PM

1. Install Nachos (OS) in your system and execute the test programs given in Nachos fold. Full tutorial and installation guides are provided.
   https://cs.nyu.edu/courses/spring05/V22.0202-001/building.htm (installation guide)
   http://linuxnewborns.blogspot.in/2011/09/installing-nachos-inside-ubuntu.html

   https://www.cs.rit.edu/~mpv/course/os2/NachosPrimer.pdf (Tutorial)

2. Write a code to help professor to synchronize with his/her students. If there are students who want to ask questions then following rules should be followed i) only one person is speaking at any one time, ii)each student's question is addressed by the professor and iii) no other student should ask a question before the professor done answering the previous one. You are to write four procedures AnsStart(), AnsEnd(), QuesStart() and QuesEnd(). The professor loops running the code: AnsStart(); given answer; AnsEnd(). AnsStart() does not return until a question has been asked. Each student loop running the code: QuesStart(); ask question; QuesEnd(). QuesStart() does not return until it's the student's turn to ask the question; QuesEnd() does not return until the professor finished answering the question.