Assignment 3 "Multi-threading"
Operating Systems
Submission Deadline on Google Classroom: 15th April, 11:59 PM

As part of this assignment, you are required to:

1. Implement the barrier functionality as described in problem 7.19 (Silberchatz 10th edition). You may read and understand about barrier function from "The Little Book of Semaphores" (http://greenteapress.com/semaphores/LittleBookOfSemaphores.pdf)
2. Now download the code for Conway's Game of Life from https://www.cs.utexas.edu/users/djimenez/utsa/cs1713-3/c/life.txt. You are required to modify this code and develop a parallel Pthreads version of this code. First you need to understand data structure/algorithm for the sequential code. The sequential code will require data structure/algorithm modification.
3. Submit the following by the deadline on Google classroom:
   a. POSIX code for your parallel Game of Life. It must use the barrier() function that you developed as part of point 1 above.
   b. A picture evidence of your code working correctly.
   c. README file containing instructions to compile/execute your code. You may also put any other important instruction here that you wish to share your instructor/grader.
   d. Make a folder with your full name, roll #, and the string "Assign3". So for me this will become "AamirShafi_L141234_Assign3". In the end you should submit zip version of this folder.
4. Please check after creating the zip file that it is not corrupt and the file can be opened on other computers. We will not contact you for corrupt submissions and you will automatically get zero reward for such assignment. This is a strict requirement.
5. Please note the following. The submission link will disappear after the deadline is over. Your submission will not be accepted through email or otherwise whatever your excuse maybe. So please adhere to the deadline.