Project 04 – Queue

You will implement a Queue class and a LFSR class. LFSR is a linear feedback shift register. A linear feedback shift register is one way of generating a sequence of numbers that appear to be random. The sequence will eventually repeat so it is a “pseudo random” sequence. The LFSR class will be a client of the Queue class. To initialize the LFSR object, it requires a string of ones and zeros. They are the starting contents of the queue and two integers will identify the specific values within that will be used to compute the next value of the pseudo random sequence. A peek function in the Queue class is used to retrieve the desired values out of the queue. Peek(n) returns the value stored n positions away from the front value of the queue. For example, Peek(0) give the front value, Peek(1) gives the value behind the front value and so forth. Peek will require a loop to traverse the pointer links to locate the value of interest.

main.cpp is a driver program to test Queue and LFSR classes. Queue.h and lfsr.h are given. Your task is to complete the lfsr.cpp and queue.cpp file. Input files are given. You can use the given makefile to compile this program.

Reference:
LFSR register: https://en.wikipedia.org/wiki/Linear_feedback_shift_register