```cpp
 1: // "Copyright 2020 <Greg Kaplowitz>"
 2: #ifndef FibLFSR_HPP
 3: #define FibLFSR_HPP
 4:
 5:
 6: #include <string>
 7: #include <iostream>
 8: #include <sstream>
 9: #include <cmath>
10:   // using namespace sf;
11:   using namespace std;
12:
13:   class LFSR {
14:   public:
15:   LFSR(std::string Seed);// constructor
16:   int step();// simulates one step
17:   int generate(int k);// generates an integer of k bits of the processes
18:   friend std::ostream& operator<< (std::ostream &out, const LFSR &lFSR);
19:   private:
20:   std::string seed;
21:   };
22: #endif
```