```
 1: //
 2: //  LFSR.hpp
 3: //  ps2
 4: //
 5: //  Created by Jingxian Shi on 2/5/18.
 6: //  Copyright © 2018 Jingxian Shi. All rights reserved.
 7: //
 8:
 9: #ifndef LFSR_hpp
10: #define LFSR_hpp
11:
12: #include <stdio.h>
13: #include <iostream>
14: #include <string>
15: using namespace std;
16:
17: class LFSR
18: {
19: public:
20:     LFSR(string s, int pos);
21:     ~LFSR();
22:     int step();
23:     int generate(int k);
24:
25:     friend ostream& operator<< (ostream& out, LFSR &cLFSR);
26: private:
27:     string seed;
28:     int tap;
29: };
30:
31: #endif /* LFSR_hpp */
32:
```