

```
1: #ifndef FibLFSR_H_
2: #define FibLFSR_H_
3: #include <string>
4: #include <vector>
5: #include <iostream>
6:
7: using namespace std;
8:
9: class FibLFSR {
10: public:
11:     FibLFSR(string seed);    // constructor to create LFSR with
12:                             // the given initial seed
13:     int step();              // simulate one step and return the
14:                             // new bit as 0 or 1
15:     int generate(int k);      // simulate k steps and return
16:                             // k-bit integer
17:     friend ostream& operator<<(ostream& out, FibLFSR CurrentBits);
18: private:
19:     vector<int> list;
20: };
21:
22: #endif
```