

```
1:
2:
3: #include <iostream>
4: #include <string>
5: #include <cmath>
6:
7:
8: class LFSR {
9:
10: public:
11:     LFSR(std::string seed_, int tap_);
12:     ~LFSR();
13:     int step();
14:     int generate(int k);
15:
16:     friend std::ostream& operator<< (std::ostream &out, LFSR &lfsr);
17:
18: private:
19:     std::string seed;
20:     int tap;
21: };
22:
```