```
 1: /*
 2: Computing IV – Assignment – PS1a + b
 3: Instructor: Prof. Yelena Rykalova
 4: Due Date: 02/07/22
 5: Author: Matthew Lorette Anaya
 6: Description: This program is an implementation of a Fibonacci Linear Feed
back                Shift Register
 7:                 This is a header file with the FibLFSR class definition
 8: */
 9:
10: #include <iostream>
11:
12: class FibLFSR {
13:
14:  public:
15:    FibLFSR(std::string seed);
16:
17:    int step();
18:
19:    int generate(int k);
20:
21:    friend std::ostream& operator<<(std::ostream& os, FibLFSR &lfsr);
22:
23:  private:
24:    std::string reg;
25:
26:    int getBit(char a);
27:
28:    int xOr(int a, int b);
29:
30: };
31:
32:
```