

```
#include <iostream>
#include <fstream>

/*
 * echo "This is some text" > input.txt
 */

using namespace std;

int main() {
    ifstream fs("input.txt");

    if (fs) {
        cout << "ifstream is in a good state\n";
        //keep reading while state is good
        int count = 0;
        while(fs.good()) {
            string line;
            fs >> line;
            if (line.size() > 0) {
                ++count;
            }
        }
        cout << "Read " << count << " words\n";
    }

    if (fs.bad()) {
        cout << "ifstream is in a bad state\n";
    }

    if (fs.fail()) {
        cout << "ifstream is in a fail state\n";
    }

    if (fs.eof()) {
        cout << "ifstream is in an EOF state\n";
    }

    cout << std::showbase << std::hex << (int)fs.rdstate() << "\n";
    fs.setstate(ios::eofbit);

    cout << std::showbase << std::hex << (int)fs.rdstate() << "\n";
    return 0;
}
```