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/* The following code example is taken from the book
 * "The C++ Standard Library – A Tutorial and Reference"
 * by Nicolai M. Josuttis, Addison-Wesley, 1999
 *
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 */
#include <iterator>
#include <algorithm>
#include <fstream>
#include <iostream>

int countLines (std::istream& in);

int main (int argc, char* argv[])
{
    int count;

    if (argc == 1) {
        // no argument => count lines of standard input
        count = countLines(std::cin);
    }
    else {
        // count number of lines of all files passed as argument
        std::ifstream in;
        count = 0;
        for (int i=1; i<argc; ++i) {
            in.open(argv[i]);
            if (!in) {
                std::cerr << "failed to open " << argv[i] << "\n";
            }
            else {
                count += countLines(in);
                in.close();
            }
        }
    }
    std::cout << count << std::endl;
}

int countLines (std::istream& in)
{
    return std::count(std::istreambuf_iterator<char>(in),
                     std::istreambuf_iterator<char>(),
                     '\n');
}

```