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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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 * warranty, and with no claim as to its suitability for any purpose.
 */
#include <streambuf>
#include <locale>
#include <cstdio>

class outbuf : public std::streambuf
{
protected:
    /* central output function
     * – print characters in uppercase mode
     */
    virtual int_type overflow (int_type c) {
        if (c != EOF) {
            // convert lowercase to uppercase
            c = std::toupper(c, getloc());

            // and write the character to the standard output
            if (putchar(c) == EOF) {
                return EOF;
            }
        }
        return c;
    }
};

```