```cpp
/* 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 <iostream>
#include <list>
#include <algorithm>
using namespace std;

int main()
{
    list<int> coll;

    // insert elements from 6 to 1 and 1 to 6
    for (int i=1; i<=6; ++i) {
        coll.push_front(i);
        coll.push_back(i);
    }

    // remove all elements with value 3
    // - poor performance
    coll.erase (remove(coll.begin(),coll.end(),
                       3),
                coll.end());

    // remove all elements with value 4
    // - good performance
    coll.remove (4);
}
```