

```

/* The following code example is taken from the book
 * "The C++ Standard Library – A Tutorial and Reference, 2nd Edition"
 * by Nicolai M. Josuttis, Addison-Wesley, 2012
 *
 * (C) Copyright Nicolai M. Josuttis 2012.
 * Permission to copy, use, modify, sell and distribute this software
 * is granted provided this copyright notice appears in all copies.
 * This software is provided "as is" without express or implied
 * warranty, and with no claim as to its suitability for any purpose.
 */
#include <iostream>
#include <list>
#include <algorithm>
#include "print.hpp"
using namespace std;

int main()
{
    list<int> coll = { 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 };
    PRINT_ELEMENTS(coll, "coll:      ");

    // remove third element
    list<int>::iterator pos;
    int count=0;          // call counter
    pos = remove_if(coll.begin(), coll.end(),    // range
                    [count](int) mutable {      // remove criterion
                        return ++count == 3;
                    });
    coll.erase(pos, coll.end());

    PRINT_ELEMENTS(coll, "3rd removed: ");
}

```