```cpp
/* 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
 *
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 */
#include "algostuff.hpp"
using namespace std;
using namespace std::placeholders;

int main()
{
    list<int> coll1;

    INSERT_ELEMENTS(coll1,1,6);
    INSERT_ELEMENTS(coll1,1,9);
    PRINT_ELEMENTS(coll1);

    // print elements without those having the value 3
    remove_copy(coll1.cbegin(), coll1.cend(),       // source
                ostream_iterator<int>(cout," "),    // destination
                3);                                 // removed value
    cout << endl;

    // print elements without those having a value greater than 4
    remove_copy_if(coll1.cbegin(), coll1.cend(),    // source
                ostream_iterator<int>(cout," "),    // destination
                [](int elem){       // criterion for elements NOT copied
                    return elem>4;
                });
    cout << endl;

    // copy all elements not less than 4 into a multiset
    multiset<int> coll2;
    remove_copy_if(coll1.cbegin(), coll1.cend(),    // source
                inserter(coll2,coll2.end()),        // destination
                bind(less<int>(),_1,4));            // elements NOT copied
    PRINT_ELEMENTS(coll2);
}
```