```
/* 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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 * warranty, and with no claim as to its suitability for any purpose.
 */
#include "algostuff.hpp"
using namespace std;
using namespace std::placeholders;

int main()
{
    list<int> coll;

    INSERT_ELEMENTS(coll,2,6);
    INSERT_ELEMENTS(coll,4,9);
    PRINT_ELEMENTS(coll);

    // print all elements with value 5 replaced with 55
    replace_copy(coll.cbegin(), coll.cend(),          // source
                 ostream_iterator<int>(cout," "),     // destination
                 5,                                   // old value
                 55);                                 // new value
    cout << endl;

    // print all elements with a value less than 5 replaced with 42
    replace_copy_if(coll.cbegin(), coll.cend(),       // source
                    ostream_iterator<int>(cout," "), // destination
                    bind(less<int>(),_1,5),          // replacement criterion
                    42);                             // new value
    cout << endl;

    // print each element while each odd element is replaced with 0
    replace_copy_if(coll.cbegin(), coll.cend(),       // source
                    ostream_iterator<int>(cout," "), // destination
                    [](int elem){                    // replacement criterion
                        return elem%2==1;
                    },
                    0);                              // new value
    cout << endl;
}
```