

```

/* 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 "alghostuff.hpp"
using namespace std;

int main()
{
    list<int> coll;

    INSERT_ELEMENTS(coll, 2, 7);
    INSERT_ELEMENTS(coll, 4, 9);
    PRINT_ELEMENTS(coll, "coll: ");

    // replace all elements with value 6 with 42
    replace (coll.begin(), coll.end(),    // range
            6,                            // old value
            42);                          // new value
    PRINT_ELEMENTS(coll, "coll: ");

    // replace all elements with value less than 5 with 0
    replace_if (coll.begin(), coll.end(), // range
               [](int elem) {             // criterion for replacement
                   return elem<5;
               },
               0);                        // new value
    PRINT_ELEMENTS(coll, "coll: ");
}

```