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/* 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()
{
    // initialize source collection with ".....abcdef....."
    vector<char> source(10, '.');
    for (int c='a'; c<='f'; c++) {
        source.push_back(c);
    }
    source.insert(source.end(), 10, '.');
    PRINT_ELEMENTS(source, "source: ");

    // copy all letters three elements in front of the 'a'
    vector<char> c1(source.cbegin(), source.cend());
    copy (c1.cbegin()+10, c1.cbegin()+16,           // source range
          c1.begin()+7);                             // destination range
    PRINT_ELEMENTS(c1, "c1:      ");

    // copy all letters three elements behind the 'f'
    vector<char> c2(source.cbegin(), source.cend());
    copy_backward (c2.cbegin()+10, c2.cbegin()+16,   // source range
                  c2.begin()+19);                     // destination range
    PRINT_ELEMENTS(c2, "c2:      ");
}

```