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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 <algorithm>
#include <iterator>
#include <list>
#include <vector>
#include <deque>
#include <set>
#include <iostream>
using namespace std;

int main()
{
    list<int> coll1 = { 1, 2, 3, 4, 5, 6, 7, 8, 9 };

    // copy the elements of coll1 into coll2 by appending them
    vector<int> coll2;
    copy (coll1.cbegin(), coll1.cend(),      // source
          back_inserter(coll2));             // destination

    // copy the elements of coll1 into coll3 by inserting them at the front
    // - reverses the order of the elements
    deque<int> coll3;
    copy (coll1.cbegin(), coll1.cend(),      // source
          front_inserter(coll3));            // destination

    // copy elements of coll1 into coll4
    // - only inserter that works for associative collections
    set<int> coll4;
    copy (coll1.cbegin(), coll1.cend(),      // source
          inserter(coll4, coll4.begin()));    // destination
}

```