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/* The following code example is taken from the book
 * "The C++ Standard Library – A Tutorial and Reference"
 * by Nicolai M. Josuttis, Addison-Wesley, 1999
 *
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 */
#include <iostream>
#include <vector>
#include <list>
#include <deque>
#include <set>
#include <algorithm>
using namespace std;

int main()
{
    list<int> coll1;

    // insert elements from 1 to 9 into the first collection
    for (int i=1; i<=9; ++i) {
        coll1.push_back(i);
    }

    // copy the elements of coll1 into coll2 by appending them
    vector<int> coll2;
    copy (coll1.begin(), coll1.end(),          // 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.begin(), coll1.end(),          // source
          front_inserter(coll3));              // destination

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

```