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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 <algorithm>
using namespace std;

int main()
{
    list<int> coll1;
    vector<int> coll2;

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

    // resize destination to have enough room for the overwriting algorithm
    coll2.resize (coll1.size());

    /* copy elements from first into second collection
     * – overwrites existing elements in destination
     */
    copy (coll1.begin(), coll1.end(),          // source
          coll2.begin());                      // destination

    /* create third collection with enough room
     * – initial size is passed as parameter
     */
    deque<int> coll3(coll1.size());

    // copy elements from first into third collection
    copy (coll1.begin(), coll1.end(),          // source
          coll3.begin());                      // destination
}

```