

```

/* 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 "alghostuff.hpp"
using namespace std;

void printCollection (const list<int>& l)
{
    PRINT_ELEMENTS(l);
}

bool lessForCollection (const list<int>& l1, const list<int>& l2)
{
    return lexicographical_compare
        (l1.begin(), l1.end(),    // first range
         l2.begin(), l2.end());  // second range
}

int main()
{
    list<int> c1, c2, c3, c4;

    // fill all collections with the same starting values
    INSERT_ELEMENTS(c1, 1, 5);
    c4 = c3 = c2 = c1;

    // and now some differences
    c1.push_back(7);
    c3.push_back(2);
    c3.push_back(0);
    c4.push_back(2);

    // create collection of collections
    vector<list<int> > cc;

    cc.push_back(c1);
    cc.push_back(c2);
    cc.push_back(c3);
    cc.push_back(c4);
    cc.push_back(c3);
    cc.push_back(c1);
    cc.push_back(c4);
    cc.push_back(c2);

    // print all collections
    for_each (cc.begin(), cc.end(),
              printCollection);
    cout << endl;
}

```

```
// sort collection lexicographically
sort (cc.begin(), cc.end(),    // range
      lessForCollection);    // sorting criterion

// print all collections again
for_each (cc.begin(), cc.end(),
          printCollection);
}
```