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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 <algorithm>
using namespace std;

int main()
{
    vector<int> coll;
    vector<int>::iterator pos;

    // insert elements from 1 to 6 in arbitrary order
    coll.push_back(2);
    coll.push_back(5);
    coll.push_back(4);
    coll.push_back(1);
    coll.push_back(6);
    coll.push_back(3);

    // find and print minimum and maximum elements
    pos = min_element (coll.begin(), coll.end());
    cout << "min: " << *pos << endl;
    pos = max_element (coll.begin(), coll.end());
    cout << "max: " << *pos << endl;

    // sort all elements
    sort (coll.begin(), coll.end());

    // find the first element with value 3
    pos = find (coll.begin(), coll.end(), // range
               3);                       // value

    // reverse the order of the found element with value 3 and all following
    // elements
    reverse (pos, coll.end());

    // print all elements
    for (pos=coll.begin(); pos!=coll.end(); ++pos) {
        cout << *pos << ' ';
    }
    cout << endl;
}

```