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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 <list>
#include <algorithm>
using namespace std;

int main()
{
    list<int> coll;

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

    // find position of element with value 5
    list<int>::iterator pos;
    pos = find (coll.begin(), coll.end(),    // range
               5);                          // value

    // print value of the element
    cout << "pos:  " << *pos << endl;

    // convert iterator to reverse iterator
    list<int>::reverse_iterator rpos(pos);

    // print value of the element to which the reverse iterator refers
    cout << "rpos:  " << *rpos << endl;

    // convert reverse iterator back to normal iterator
    list<int>::iterator rrpos;
    rrpos = rpos.base();

    // print value of the element to which the normal iterator refers
    cout << "rrpos:  " << *rrpos << endl;
}

```