

```

/* The following code example is taken from the book
 * "The C++ Standard Library – A Tutorial and Reference"
 * by Nicolai M. Josuttis, Addison-Wesley, 1999
 *
 * (C) Copyright Nicolai M. Josuttis 1999.
 * Permission to copy, use, modify, sell and distribute this software
 * is granted provided this copyright notice appears in all copies.
 * This software is provided "as is" without express or implied
 * warranty, and with no claim as to its suitability for any purpose.
 */
#include "alghostuff.hpp"
using namespace std;

int main()
{
    list<int> coll;

    INSERT_ELEMENTS(coll, 1, 9);
    PRINT_ELEMENTS(coll);

    // check existence of element with value 5
    if (binary_search(coll.begin(), coll.end(), 5)) {
        cout << "5 is present" << endl;
    }
    else {
        cout << "5 is not present" << endl;
    }

    // check existence of element with value 42
    if (binary_search(coll.begin(), coll.end(), 42)) {
        cout << "42 is present" << endl;
    }
    else {
        cout << "42 is not present" << endl;
    }
}

```