```cpp
/* The following code example is taken from the book
 * "The C++ Standard Library - A Tutorial and Reference, 2nd Edition"
 * by Nicolai M. Josuttis, Addison-Wesley, 2012
 *
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 */
#include "algostuff.hpp"
using namespace std;

bool bothEvenOrOdd (int elem1, int elem2)
{
    return elem1 % 2 == elem2 % 2;
}

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

    INSERT_ELEMENTS(coll1,1,7);
    INSERT_ELEMENTS(coll2,3,9);

    PRINT_ELEMENTS(coll1,"coll1: ");
    PRINT_ELEMENTS(coll2,"coll2: ");

    // check whether both collections are equal
    if (equal (coll1.begin(), coll1.end(),  // first range
               coll2.begin())) {            // second range
        cout << "coll1 == coll2" << endl;
    }
    else {
        cout << "coll1 != coll2" << endl;
    }

    // check for corresponding even and odd elements
    if (equal (coll1.begin(), coll1.end(),  // first range
               coll2.begin(),               // second range
               bothEvenOrOdd)) {            // comparison criterion
        cout << "even and odd elements correspond" << endl;
    }
    else {
        cout << "even and odd elements do not correspond" << endl;
    }
}
```