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/* 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 <vector>
#include <algorithm>
#include <iostream>
using namespace std;

// simple function object that prints the passed argument
class PrintInt {
public:
    void operator() (int elem) const {
        cout << elem << ' ';
    }
};

int main()
{
    vector<int> coll;

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

    // print all elements
    for_each (coll.cbegin(), coll.cend(), // range
              PrintInt());               // operation
    cout << endl;
}

```