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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 <cstdlib>
#include "alghostuff.hpp"
using namespace std;

int main()
{
    vector<int> coll;

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

    // shuffle all elements randomly
    random_shuffle (coll.begin(), coll.end());

    PRINT_ELEMENTS(coll,"shuffled: ");

    // sort them again
    sort (coll.begin(), coll.end());
    PRINT_ELEMENTS(coll,"sorted:   ");

    // shuffle elements with default engine
    default_random_engine dre;
    shuffle (coll.begin(), coll.end(),    // range
            dre);                          // random-number generator

    PRINT_ELEMENTS(coll,"shuffled: ");
}

```