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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 <iostream>
#include <algorithm>
#include <functional>
#include <iterator>
using namespace std;

int main()
{
    int coll[] = { 5, 6, 2, 4, 1, 3 };

    // square all elements
    transform (coll, coll+6,          // first source
               coll,                   // second source
               coll,                   // destination
               multiplies<int>());     // operation

    // sort beginning with the second element
    sort (coll+1, coll+6);

    // print all elements
    copy (coll, coll+6,
          ostream_iterator<int>(cout, " "));
    cout << endl;
}

```