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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 "alghostuff.hpp"
using namespace std;

int main()
{
    deque<int> coll;

    INSERT_ELEMENTS(coll,1,6);
    PRINT_ELEMENTS(coll);

    // print all differences between elements
    adjacent_difference (coll.cbegin(), coll.cend(), // source
                        ostream_iterator<int>(cout," "), // destination
                        cout << endl;

    // print all sums with the predecessors
    adjacent_difference (coll.cbegin(), coll.cend(), // source
                        ostream_iterator<int>(cout," "), // destination
                        plus<int>(), // operation
                        cout << endl;

    // print all products between elements
    adjacent_difference (coll.cbegin(), coll.cend(), // source
                        ostream_iterator<int>(cout," "), // destination
                        multiplies<int>(), // operation
                        cout << endl;
}

```