```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 <iostream>
#include <list>
#include <algorithm>
#include <iterator>
#include "print.hpp"
using namespace std;

class IntSequence {
  private:
    int value;
  public:
    IntSequence (int initialValue)     // constructor
     : value(initialValue) {
    }

    int operator() () {                // "function call"
        return value++;
    }
};

int main()
{
    list<int> coll;

    // insert values from 1 to 9
    generate_n (back_inserter(coll),   // start
                9,                     // number of elements
                IntSequence(1));       // generates values, starting with 1

    PRINT_ELEMENTS(coll);

    // replace second to last element but one with values starting at 42
    generate (next(coll.begin()),      // start
              prev(coll.end()),        // end
              IntSequence(42));        // generates values, starting with 42

    PRINT_ELEMENTS(coll);
}
```