

```

1 // Demonstration von C++ - vector
2 // Der notwendige Speicher wird bereitgestellt
3
4 // g++ -std=c++11 -pedantic -Wall main.cpp
5
6 #include <iostream>
7 #include <vector>
8 using namespace std;
9
10 int main()
11 {
12     const int N=11;
13     vector<int> cc;           // Laenge 0;
14
15     for (int i = 0; i < N; ++i )    // Laenge von Vektor aa: aa.size()
16     {
17         cc.push_back(i+1);
18         cout << cc.size() << " :: " << cc.capacity() << endl;
19     }
20
21     cc.resize(N);              // Laenge 11, Capacity 16
22     cout << cc.size() << " # resize # " << cc.capacity() << endl;
23
24     cc.reserve(2*N);          // Laenge 11, Capacity 22
25     cout << cc.size() << " # reserve # " << cc.capacity() << endl;
26
27     cc.erase( cc.begin()+4 , cc.end() ); // Laenge 4, Capacity 22
28     cout << cc.size() << " # erase # " << cc.capacity() << endl;
29
30     vector<int> dd(cc);       // Laenge 4, Capacity 4
31     cout << dd.size() << " * Copy-Konstr. * " << dd.capacity() << endl;
32
33
34     cc.shrink_to_fit(); // C++11: Laenge 4, Capacity 4
35     cout << cc.size() << " * shrink_to_fit [C++11] * " << cc.capacity() << endl;
36
37     return 0;
38 }

```