

```

1  // Please see README.txt
2  // We will go over the answers in class.
3  // Thank you.
4
5  #include <iostream>
6  #include <vector>
7  using namespace std;
8
9  static int x = 1;
10 int y = x * 2;
11
12 void t1() {
13     y++;
14     cout << "x: " << x << " | y: " << y << endl;
15     y += 1;
16     x -= -1;
17 }
18
19 void t2() {
20     int* x = &y;
21     cout << "x: " << x << " | y: " << y << endl;
22 }
23
24 void t3() {
25     int y = x;
26     static int x = 2;
27     cout << "x: " << x + 1 << " | y: " << y + x << endl;
28     x += y;
29 }
30
31 void t4() {
32     int y = x + 1;
33     int& z = y;
34     z += -1;
35     cout << "x: " << x + z << " | y: " << y << endl;
36 }
37
38 int main() {
39     vector<int> vec1{ 1, 3, 5, 7, 9 };
40     vector<int> vec2{ 2, 4, 6, 8, 10 };
41     vec1.swap(vec2);
42     int * ptr = &vec1[1];
43     y = *(ptr + 2);
44
45     t1();
46     t2();
47     t3();
48     t3();
49     t4();
50     return 0;
51 }
52 /*
53 x: 1 | y: 9
54 x: 003B32E8 | y: 10
55 x: 3 | y: 4
56 x: 5 | y: 6
57 x: 4 | y: 2
58 */

```