```cpp
// Please see README.txt
// We will go over the answers in class.
// Thank you.

#include <iostream>
#include <vector>
using namespace std;

static int x = 1;
int y = x * 2;

void t1() {
    y++;
    cout << "x: " << x << " | y: " << y << endl;
    y += 1;
    x -= -1;
}

void t2() {
    int* x = &y;
    cout << "x: " << x << " | y: " << y << endl;
}

void t3() {
    int y = x;
    static int x = 2;
    cout << "x: " << x + 1 << " | y: " << y + x << endl;
    x += y;
}

void t4() {
    int y = x + 1;
    int& z = y;
    z += -1;
    cout << "x: " << x + z << " | y: " << y << endl;
}

int main() {
    vector<int> vec1{ 1, 3, 5, 7, 9 };
    vector<int> vec2{ 2, 4, 6, 8, 10 };
    vec1.swap(vec2);
    int * ptr = &vec1[1];
    y = *(ptr + 2);

    t1();
    t2();
    t3();
    t3();
    t4();
    return 0;
}
/*
x: 1 | y: 9
x: 003B32E8 | y: 10
x: 3 | y: 4
x: 5 | y: 6
x: 4 | y: 2
*/
```