```
1   // Please see README.txt
2   // We will go over the answers in class.
3   // Thank you.
4
5   #include <iostream>
6   #include <typeinfo>
7   using namespace std;
8
9   int x = 1, y = -1;
10
11  void swapplus1(int n1, int n2) {
12      int temp = n1 + 1;
13      n1 = n2 - 1;
14      n2 = temp;
15      x = x + n1;
16  }
17
18  void swapplus2(int& n1, int& n2) {
19      int temp = n1 + 1;
20      n1 = n2 - 1;
21      n2 = temp;
22  }
23
24  void swapplus3(const int& n1, const int& n2) {
25      int n1val, n2val, temp = n1 + 1;
26      n1val = n2 - 1;
27      n2val = temp;
28      y -= n2;
29  }
30
31  void swapplus4(int* p1, int* p2) {
32      int temp = *p1 + 1;
33      *p1 = *p2 + 1;
34      *p2 = temp;
35      x = *p1 + y;
36  }
37
38  void swapplus5(int* &p1, int* &p2) {
39      int* temp = p1 + 1;
40      p1 = p2 - 1;
41      p2 = temp;
42  }
43
44  void print(const int& x, const int& y) {
45      cout << "\n x: " << x << " |y: " << y;
46  }
47
48  int main() {
49      int arr[]{ 2, 4, 6, 8, 10, 12, 14 };
50      y = arr[3] / size(arr) ;
51
52      swapplus1(x, y);    print(x, y);
53      swapplus2(x, y);    print(x, y);
54      swapplus3(x, y);    print(x, y);
55      swapplus4(&x, &y);  print(x, y);
56      int *px = &x, *py = &y;
57      (*px)--;
58      (*py) -= -7;
59      swapplus5(px, py);  print(x, y);
60      return 0;
61  }
62
63  /*
64      x : 1 | y : 1
65      x : 0 | y : 2
```

```
66        x : 0 | y : 0
67        x : 2 | y : 1
68        x : 1 | y : 8
69    */
```