

```
1  #include <iostream>
2  #include <vector>
3  #include<algorithm>
4  using namespace std;
5  //Предикат
6  bool gt5(float arg)
7  {
8      return arg > 5.;
9  }
10 int main(int argc, char** argv)
11 {
12     int a[] = {8, 3, 5, 2, 9};
13     int b[10];
14     copy(a, a + 3, b);
15     for (int i = 0; i < 3; i++)
16     {
17         cout << b[i] << " ";
18     }
19     cout << endl;
20     //8 3 5
21     sort(a, a + 5);
22     for (int i = 0; i < 5; i++)
23     {
24         cout << a[i] << " ";
25     }
26     cout << endl;
27     //2 3 5 8 9
28     vector<float> v(8);
29     v[0] = 6.4;
30     v[1] = 2.0;
31     v[2] = 3.5;
32     v[3] = 2.4;
33     v[4] = 8.1;
34     v[5] = 7.8;
35     v[6] = 5.3;
36     v[7] = 4.2;
37     for (int i = 0; i < 8; i++)
38     {
39         cout << v[i] << " ";
40     }
41     cout << endl;
42     //6.4 2 3.5 2.4 8.1 7.8 5.3 4.2
43     sort(v.begin(), v.end());
44     for (int i = 0; i < 8; i++)
45     {
46         cout << v[i] << " ";
47     }
48     cout << endl;
49     //2 2.4 3.5 4.2 5.3 6.4 7.8 8.1
50     random_shuffle(v.begin(), v.end());
51     replace_if(v.begin(), v.end(), gt5, 5.);
52     for (int i = 0; i < 8; i++)
53     {
54         cout << v[i] << " ";
55     }
56     cout << endl;
57     //5 4.2 5 5 2 5 3.5 2.4
58     system("pause");
59     return (EXIT_SUCCESS);
60 }
```