<https://github.com/alena56taR/VVP>

1.

#include <iostream>

using namespace std;

int main()

{

setlocale(LC\_ALL, "Russian");

int a[10], b[10], c[10];

int n;

cout << "N:";

cin >> n;

int i;

for (i = 0; i < n; ++i)

{

cout << "a[" << i + 1 << "]=";

cin >> a[i];

}

int k = 0;

b[k] = 1;

c[k] = a[k];

for (i = 1; i < n; ++i)

{

if (a[i - 1] == a[i])

++b[k];

else

{

++k;

b[k] = 1;

c[k] = a[i];

}

}

for (i = 0; i < k + 1; ++i)

cout << "b[" << i + 1 << "]=" << b[i] << " , c[" << i + 1 << "]=" << c[i] << "\n";

return 0;

}

2.

#include <iostream>

using namespace std;

int main()

{

setlocale(LC\_ALL, "Russian");

int a[10], b[10];

int n,l;

cout << "N:";

cin >> n;

cout << "L:";

cin >> l;

int i;

for (i = 0; i < n; ++i)

{

cout << "a[" << i + 1 << "]=";

cin >> a[i];

}

int j = -1, l1 = 1, k, n1 = n;

for (i = 1; i < n; ++i) {

if (a[i - 1] != a[i]) {

if (l1 > l) {

b[++j] = 0;

n1 -= l1 - 1;

}

else {

for (k = 0; k < l1; ++k) b[++j] = a[i - 1];

} l1 = 0;

} ++l1;

} if (l1 > l) {

b[++j] = 0;

n1 -= l1 - 1;

}

else {

for (k = 0; k < l1; ++k) b[++j] = a[i - 1];

}

for (i = 0; i < n1; ++i) a[i] = b[i];

for (i = 0; i < n1; ++i)

cout << "a[" << i + 1 << "]=" << a[i] << "\n";

return 0;

}

3.

#include <iostream>

using namespace std;

int main()

{

setlocale(LC\_ALL, "Russian");

int a[10], b[10];

int n,k;

cout << "N:";

cin >> n;

cout << "K:";

cin >> k;

int i;

for (i = 0; i < n; ++i)

{

cout << "a[" << i + 1 << "]=";

cin >> a[i];

}

int nk = 1, h1 = 1, h2 = (k == 1 ? 1 : 0), h3;

for (i = 1; i < n; ++i) {

if (a[i - 1] != a[i]) {

nk++;

if (nk == k) h1 = i;

h3 = i;

}

if (nk == k) h2++;

}

int i2 = -1;

for (i = 0; i < h1; ++i) b[++i2] = a[i];

for (i = h3; i < n; ++i) b[++i2] = a[i];

for (i = h1 + h2; i < h3; ++i) b[++i2] = a[i];

for (i = h1; i < h1 + h2; ++i) b[++i2] = a[i];

for (i = 0; i < n; ++i) a[i] = b[i];

for (i = 0; i < n; ++i)

cout << "a[" << i + 1 << "]=" << a[i] << "\n";

return 0;

}

4.

#include <iostream>

using namespace std;

int main()

{

setlocale(LC\_ALL, "Russian");

float a[10][2];

int n;

cout << "N:";

cin >> n;

int i;

for (i = 0; i < n; ++i)

{

cout << "a[" << i + 1 << "]:" << "\n";

cout << "x=";

cin >> a[i][0];

cout << "y=";

cin >> a[i][1];

"\n";

}

int amax = -1;

double r, rmax=0;

for (i = 0; i < n; ++i) {

if (a[i][0] < 0 && a[i][1]>0)

{

r = sqrt(pow(a[i][0], 2) + pow(a[i][1], 2));

if (r > rmax)

{

rmax = r;

amax = i;

}

}

}

if (rmax=0)

{

a[amax][0] = 0;

a[amax][1] = 0;

}

cout << "a[" << amax + 1 << "]:" << "\n";

cout << "x=" << a[amax][0];

cout << ", y=" << a[amax][1]<< "\n";

return 0;

}

5.

#include <iostream>

using namespace std;

int main()

{

setlocale(LC\_ALL, "Russian");

float a[10][2];

int n;

cout << "N:";

cin >> n;

int i;

for (i = 0; i < n; ++i)

{

cout << "a[" << i + 1 << "]:" << "\n";

cout << "x=";

cin >> a[i][0];

cout << "y=";

cin >> a[i][1];

"\n";

}

int p1, p2, p3, j, z;

float p, pmax = 0;

for (i = 0; i < n; ++i)

for (j = i + 1; j < n; ++j)

for (z = j + 1; z < n; ++z) {

p = 0;

p += sqrt(pow(a[i][0] - a[j][0], 2) + pow(a[i][1] - a[j][1], 2));

p += sqrt(pow(a[i][0] - a[z][0], 2) + pow(a[i][1] - a[z][1], 2));

p += sqrt(pow(a[j][0] - a[z][0], 2) + pow(a[j][1] - a[z][1], 2));

if (p > pmax)

{

p1 = i;

p2 = j;

p3 = z;

pmax = p;

}

}

cout << "P=" << pmax << " при:" << "\n";

cout << "a[" << p1 + 1 << "]:" << "\n";

cout << "x=" << a[p1][0];

cout << ", y=" << a[p1][1]<< "\n";

cout << "a[" << p2 + 1 << "]:" << "\n";

cout << "x=" << a[p2][0];

cout << ", y=" << a[p2][1] << "\n";

cout << "a[" << p3 + 1 << "]:" << "\n";

cout << "x=" << a[p3][0];

cout << ", y=" << a[p3][1] << "\n";

return 0;

}