

Python

```
1 def get_distance(first_point: list, second_point: list) -> float:
2     return ((first_point[0]-second_point[0])**2 + (first_point[1]-second_point[1])**2)**0.5
3
4
5     max_distance = 0
6     list_of_points = [[1, 3], [1, 5], [1, 7], [2, 8], [3, 7]]
7     for num, i in enumerate(list_of_points):
8         for j in list_of_points[num+1:]:
9             distance = get_distance(i, j)
10            if distance > max_distance:
11                max_distance = distance
12
13     print(max_distance)
MacBook-Pro-Igor-2:lab_1_siap igorchvyrov$ python3 14_var.py
5.0990195135927845
```

C++

```
1 #include <iostream>
2 #include <math.h>
3
4 using namespace std;
5
6 int main() {
7
8     int arr[5][2]{{1, 3}, {1, 5}, {1, 7}, {2, 8}, {3, 7}};
9     double tmp;
10    int p1, p2;
11    double dist = 0;
12
13    for (int i = 0; i < 5; i++) {
14        for (int j = 0; j < 5 - i; j++) {
15            tmp = sqrt(pow((arr[i][0] - arr[j][0]), 2) + pow((arr[i][1] -
16                arr[j][1]), 2)) * 1.;
17            if (tmp > dist) {
18                dist = tmp;
19                p1 = i;
20                p2 = j;
21            }
22        };
23    }
24    cout << dist << endl;
```

Output

```
/tmp/dKmmTSNgUh.o
5.09902
```