**最近对**

#include<cstdio>

#include<iostream>

#include<cmath>

using namespace std;

class Point{

public:

double x;

double y;

}point[10000];

const int INF = 2147483647;

int main(){

int n;

double dist, d;

dist = INF;

printf("请输入点的数目：");

cin >> n;

for (int i = 1; i <= n; i++) cin >> point[i].x >> point[i].y;

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

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

d = sqrt((point[i].x - point[j].x) \* (point[i].x - point[j].x) + (point[i].y - point[j].y) \* (point[i].y - point[j].y));

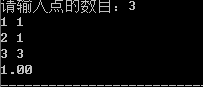
if (d < dist) dist = d;

}

printf("%.2lf", dist);

return 0;

}



**凸包**

#include<cstdio>

#include<iostream>

using namespace std;

class Point{

public:

double x;

double y;

}point[10000];

int main(){

int n;

double x1, x2, y1, y2, a, b, c;

bool f[10000], flag;

printf("请输入点的数目：");

cin >> n;

for (int i = 1; i <= n; i++) cin >> point[i].x >> point[i].y;

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

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

x1 = point[i].x; x2 = point[j].x;

y1 = point[i].y; y2 = point[j].y;

a = y2 - y1;

b = x1 - x2;

c = x1 \* y2 - x2 \* y1;

flag = true;

int kk = 0;

for (int k = 1; k <= n; k++)

if (a \* point[k].x + b \* point[k].y - c != 0)

if (!kk) kk = a \* point[k].x + b \* point[k].y - c;

else if (kk \* (a \* point[k].x + b \* point[k].y - c) < 0) flag = false;

if (flag) f[i] = f[j] = true;

}

cout << "极点为：" << endl;

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

if (f[i]) cout << i << " ";

return 0;

}

