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Directory structure: Coordinate

1. **Making array and input the coordinate, and find the distance between that coordinate and that array.**

// Course.cpp:

#include "stdafx.h"

#include "iostream"

#include "math.h"

using namespace System;

int main(array<System::String ^> ^args)

{

array <float,2> ^coordinate = gcnew array <float,2>(5,2){{0,1},{0,2},{1,1},{2,2},{4,4}};

float x,y;

Console::Write("請輸入一個x座標=");

x=Convert::ToSingle(Console::ReadLine());

Console::Write("請輸入一個y座標=");

y=Convert::ToSingle(Console::ReadLine());

int tag=0;

float min=100000;

for(int i=0;i<coordinate->GetLength(0);i++)

{

float distance=0;

distance = sqrt((x-coordinate[i,0])\*(x-coordinate[i,0])+(y-coordinate[i,1])\*(y-coordinate[i,1]));

if(distance<min)

{

min=distance;

tag=i;

}

}

Console::WriteLine("距離最近的點為第{0}個點，座標({1},{2})，距離為{3}",tag+1,coordinate[tag,0],coordinate[tag,1],min);

system("pause");

return 0;

}