斜率优化模板

下凸包，即必须是目标函数越小越好，否则自行搞为负数

const double INF=1e10;

using namespace std;

typedef long long ll;

typedef pair<ll,ll> abcd;

abcd q[M];

int r,h;

double Get\_Slope(const abcd &x,const abcd &y) //求斜率

{

if(x.first == y.first)

return x.second < y.second ? INF : -INF ;

return (double)(x.second-y.second)/(x.first-y.first);

}

void Insert(abcd x) //插入

{

while(r-h>1)

{

if( Get\_Slope(q[r],x)<Get\_Slope(q[r-1],q[r]) )

q[r--]=q[0];

else

break;

}

q[++r]=x;

}

abcd Get\_Ans(double s) //返回最优的点

{

while(r-h>1)

{

if(Get\_Slope(q[h+1],q[h+2])<s)

q[++h]=q[0];

else

break;

}

return q[h+1];

}

int main()

{

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

{

Insert( make\_pair(x坐标,y坐标) );

abcd p=Get\_Ans(斜率);

f[i] = 带入数据算答案;

}

return 0;

}

对拍

:again

mynum.exe

a1.exe

a2.exe

fc a1.out a2.out >fcnumber.txt

if not errorlevel 1 goto again

pause

int random(int x)

{

return (int)((double)rand()/RAND\_MAX\*x+0.5)%x;

}

int aaa;

freopen("int.txt","r",stdin);

scanf("%d",&aaa);

srand(aaa);

freopen("int.txt","w",stdout);

printf("%d\n",aaa+1);

freopen("seq.in","w",stdout);

random(n)+1