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Roll no :- 60

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#include<stdio.h>

#include<graphics.h>

#include<math.h>

#include<dos.h>

int main()

{

int i,gd=DETECT,gm; int

x1,y1,x2,y2,xmin,xmax,ymin,ymax,xx1,xx2,yy1,yy2,dx,d;

float t1,t2,p[4],q[4],temp; x1=120; y1=120; x2=300;

y2=300; xmin=100; ymin=100; xmax=250; ymax=250;

initgraph(&gd,&gm," "); rectangle(xmin,ymin,xmax,ymax);

dx=x2-x1; dy=y2-y1; p[0]=-dx; p[1]=dx; p[2]=-dy;

p[3]=dy; q[0]=x1-xmin; q[1]=xmax-x1; q[2]=y1-ymin;

q[3]=ymax-y1; for(i=0;i<4;i++)

{

if(p[i]==0) { prin ("line is parallel to one of the

clipping boundary"); if(q[i]>=0) { if(i<2)

{

if(y1<ymin)

{

y1=ymin;

}

if(y2>ymax)

{
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y2=ymax;
}
line(x1,y1,x2,y2);
} if(i>1)
{
if(x1<xmin)
{
x1=xmin;
}
if(x2>xmax)
{
x2=xmax;
} line(x1,y1,x2,y2);
}
}
}
} t1=0; t2=1;
for(i=0;i<4;i++)
{
temp=q[i]/p[i];
if(p[i]<0)
{
if(t1<=temp) t1=temp;
} else
{ if(t2>temp)
t2=temp;
} } if(t1<t2) { xx1
= x1 + t1 * p[1]; xx2

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= x1 + t2 * p[1]; yy1  
= y1 + t1 * p[3]; yy2  
= y1 + t2 * p[3];  
line(xx1,yy1,xx2,yy2)  
; }  
delay(5000);  
closegraph();  
}
```

