***//16.Triangle Within Rectangle//***

#include<conio.h>

#include<stdio.h>

#include<math.h>

#include<dos.h>

#include<graphics.h>

void ddaline(int,int,int,int);

void main(){

int steps,dx,dy,k,x1,y1,x2,y2,gd=DETECT,gm;

float x,y,yinc,xinc;

initgraph(&gd,&gm,"C:\\turboc3\\bgi");

ddaline(50,150,300,150);

ddaline(300,150,300,300);

ddaline(300,300,50,300);

ddaline(50,300,50,150);

line(50,300,175,150);

line(175,150,300,300);

getch();

}

void ddaline(int x1,int y1,int x2,int y2){

int dx,dy,steps,k;

float x,y,xinc,yinc;

dx=x2-x1;

dy=y2-y1;

if(abs(dx)>=abs(dy))

steps=abs(dx);

else

steps=abs(dy);

xinc=dx/steps;

yinc=dy/steps;

x=x1;

y=y1;

putpixel(x,y,15);

for(k=0;k<steps;k++){

x=x+xinc;

y=y+yinc;

putpixel(x,y,15);

}

}

***Output:*** 