**CODE:DDA**

#include<conio.h>

#include<stdio.h>

#include<graphics.h>

#include<math.h>

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

int dx,dy,steps;

float xinc,yinc,xfinal,yfinal,xi,yi;

dx = x2- x1;

dy = y2 - y1;

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

steps=abs(dx);

else

steps=abs(dy);

xinc = (float)dx / (float)steps;

yinc = (float)dy / (float)steps;

xi=(float)x1;

yi=(float)y1;

xfinal = (int)ceil(xi);

yfinal = (int)ceil(yi);

for(int i=1;i<=steps;i++){

putpixel(xfinal,yfinal,15);

xi=xi+xinc;

yi=yi+yinc;

xfinal = (int)ceil(xi);

yfinal = (int)ceil(yi);

}

}

void main(){

clrscr();

int gdriver = DETECT,gmode;

int x,y,i;

initgraph(&gdriver,&gmode,"C:\\TC\\BGI");

DDA(50,50,100,100);

DDA(250,250,200,300);

DDA(60,30,150,30);

DDA(40,40,40,120);

DDA(100,150,120,230);

DDA(150,150,200,180);

DDA(200,150,220,30);

DDA(220,150,280,120);

getch();

}

**OUTPUT:**

