**PROGRAM-DDA Lines**

#include<stdio.h>

#include<math.h>

#include<graphics.h>

#include<dos.h>

void main()

{

float x,y,x1,y1,x2,y2,dx,dy,step;

int i,gd=DETECT,gm,ch;

initgraph(&gd,&gm,"C:\\TURBOC3\\BGI\\");

printf("Enter x1,y1 \n");

scanf("%f%f",&x1,&y1);

printf("Enter x2,y2 \n");

scanf("%f%f",&x2,&y2);

printf("Enter your choice : 1Normal 2Dotted 3Dash 4Thick");

scanf("%d",&ch);

dx=abs(x2-x1);

dy=abs(y2-y1);

if(dx >=dy)

step=dx;

else

step=dy;

dx=dx/step;

dy=dy/step;

x=x1;

y=y1;

i=1;

while(i<=step)

{

switch(ch)

{

case 1:

putpixel(x,y,4);

x=x+dx;

y=y+dy;

break;

case 2:

if(i%2==0)

putpixel(x,y,4);

x=x+dx;

y=y+dy;

break;

case 3:

if(i%6!=0)

putpixel(x,y,4);

x=x+dx;

y=y+dy;

break;

case 4:

putpixel(x-1,y,4);

putpixel(x,y,4);

putpixel(x+1,y,4);

x=x+dx;

y=y+dy;

break;

default:

exit();

}

i++;

delay(10);

}

getch();

closegraph();

}

**Output:**







