

Jawahar Education Society's A. C. Patil College of Engineering, Kharghar Navi Mumbai 410210

Student Name: Chetan Ingale PRN No.: 221111030

Course Name: C.S.E. (IoT CS BC)

Course code: CSL303

Year: S.E. Semester: 3

Roll No.: 17

Experiment Evaluation Sheet

Experiment No.: 2

Experiment Name: Implement Digital Differential Analyzer (DDA) Line Drawing algorithm

Sr No.	Evaluation Criteria	Marks (Out of 9)	Performance Date	Correction Date and Signature of Instructor
1	Experiment Performance			
2	Journal Performance			
3	Punctuality			
Total				

```
Code:
 #include <graphics.h>
 #include <stdio.h>
 #include <math.h>
 #include <dos.h>
 float round(float a){
   int b=a+0.5;
   return b;
 }
 void main( ){
   float x,y,x1,y1,x2,y2,dx,dy,step,xincr,yincr,k;
   int i,gd=DETECT,gm;
   clrscr();
   printf("Enter the value of x1 and y1 : ");
   scanf("%f%f",&x1,&y1);
   printf("Enter the value of x2 and y2: ");
   scanf("%f%f",&x2,&y2);
   initgraph(&gd,&gm,"C:\\TC\\BGI");
   dx=abs(x2-x1);
   dy=abs(y2-y1);
   if(dx \ge dv)
      step=dx;
   else
      step=dy;
   xincr=dx/step;
   yincr=dy/step;
   x=x1;
   y=y1;
   for(k=1;k\leq step;k++)
      delay(10);
      x += xincr;
      y+=yincr;
      putpixel(round(x),round(y),WHITE);
   outtextxy(200,20,"DDA");
   outtextxy(x1+5,y1-5,"(x1,y1)");
   outtextxy(x2+5,y2+5,"(x2,y2)");
   getch();
   closegraph();
```

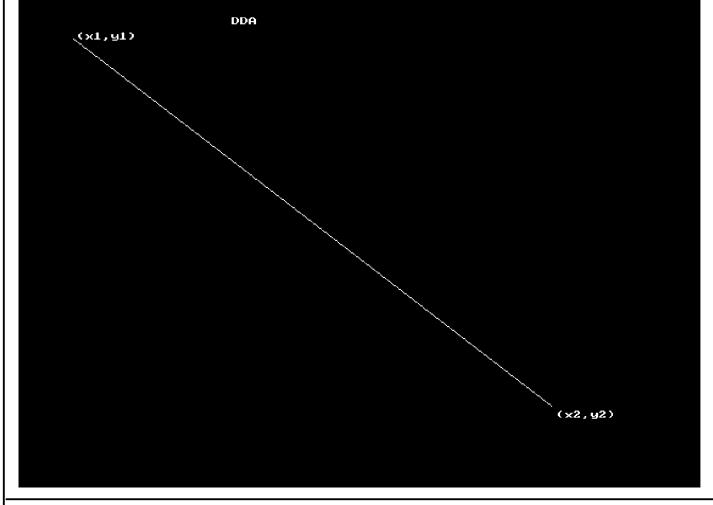
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A. C. Patil College of Engineering

Computer Graphics Lab

Output:

```
Enter the value of x1 and y1 : 50 40
Enter the value of x2 and y2: 500 400
```



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