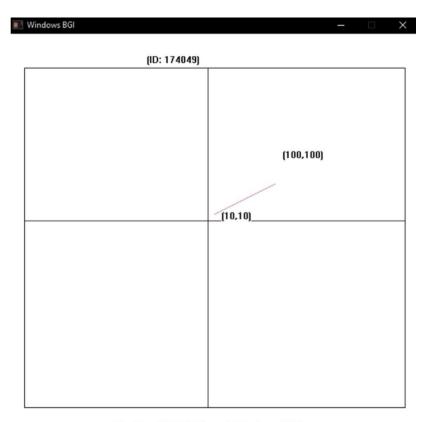
```
strcat(st,",");
Code:
                                                                 strcat(st,itoa(y1,st1,10));
Algorithm: Digital Differential Analyzer
                                                                 strcat(st,")");
                                                                 outtextxy(xstart+10,ystart-5,st);
#include<bits/stdc++.h>
#include<graphics.h>
                                                                 strcpy(st,"(");
#include<string.h>
                                                                 strcat(st,itoa(x2,st1,10));
#include<math.h>
                                                                 strcat(st,",");
using namespace std;
                                                                 strcat(st,itoa(y2,st1,10));
                                                                 strcat(st,")");
int main(){
                                                                 outtextxy(xend+10,yend-5,st);
        int Xmin, Ymin, Xmax, Ymax;
        initwindow(600,600);
                                                                 char topic[100];
        Xmin=20;
                                                                 strcpy(topic,"Algorithm: Digital
        Xmax=600-20;
                                                         Differential Analyzer(DDA)");
        Ymin=50;
                                                                 outtextxy(150,570,topic);
        Ymax=600-50;
        rectangle(Xmin,Ymin,Xmax,Ymax);
                                                                 if(m<=1)
        line(Xmax/2,Ymin,Xmax/2,Ymax);
                                                                 {
        line(Xmin,Ymax/2,Xmax,Ymax/2);
                                                                         for(int i=xstart;i<xend;i++)</pre>
        int x1,x2,y1,y2;
                                                                                  putpixel(i,ystart,10);
        float m,dx,dy,b;
                                                                                 delay(100);
        x1=10;
                                                                                 i++;
        y1=10;
                                                                                 ystart=ystart-m;
        x2=100;
                                                                         }
        y2=100;
        dx=x2-x1;
                                                                 }
        dy=y2-y1;
                                                                 else
        m=dy/dx;
                                                                 {
        int xstart,ystart,xend,yend;
                                                                         for(int i=ystart;i>yend;i++)
        xstart=x1+Xmax/2;
                                                                         {
        ystart=Ymax/2-y1;
                                                                                  putpixel(xstart,i,10);
        xend=x2+Xmax/2;
                                                                                 delay(100);
        yend=Ymax/2-y2;
                                                                                 i--;
                                                                                 xstart=xstart+1/m;
        char heading[50],h1[20];
                                                                         }
        strcpy(heading,"(ID: ");
                                                                 }
        strcat(heading,itoa(174049,h1,10));
        strcat(heading,")");
                                                                 while(!kbhit()){
        outtextxy(200,30,heading);
                                                                         delay(100);
                                                                 }
        char st[20], st1[20];
        strcpy(st,"(");
                                                         }
        strcat(st,itoa(x1,st1,10));
```

```
Algorithm: Bresenham's Line Drawing Algorithm
                                                                strcat(st,itoa(y1,st1,10));
                                                                strcat(st,")");
#include<bits/stdc++.h>
                                                                outtextxy(xstart+10,ystart-5,st);
#include<graphics.h>
#include<math.h>
                                                                strcpy(st,"(");
                                                                strcat(st,itoa(x2,st1,10));
using namespace std;
                                                                strcat(st,",");
int main(){
                                                                strcat(st,itoa(y2,st1,10));
        int Xmin, Ymin, Xmax, Ymax;
                                                                strcat(st,")");
        initwindow(600,600);
                                                                outtextxy(xend+10,yend-5,st);
        Xmin=20;
       Xmax=600-20;
                                                                char topic[100];
                                                                strcpy(topic,"Algorithm: Bresenhams's
        Ymin=50;
        Ymax=600-50;
                                                        Line Algorithm");
        rectangle(Xmin,Ymin,Xmax,Ymax);
                                                                outtextxy(150,570,topic);
        line(Xmax/2,Ymin,Xmax/2,Ymax);
        line(Xmin,Ymax/2,Xmax,Ymax/2);
                                                                inc1=2*dy;
                                                                inc2=2*dy-2*dx;
        int x1,x2,y1,y2;
        float m,dx,dy,b;
                                                                while(xstart<=xend)
       x1=10;
       y1=10;
                                                                        int d=2*dy-dx;
       x2=100;
                                                                        if(d>0)
       y2=100;
                                                                        {
        dx=x2-x1;
        dy=y2-y1;
                                                                putpixel(xstart,ystart,10);
        m=dy/dx;
                                                                                delay(100);
                                                                                d=d+inc2;
        int xstart,ystart,xend,yend,inc1,inc2;
                                                                                ystart--;
        xstart=x1+Xmax/2;
                                                                        }
        ystart=Ymax/2-y1;
                                                                        else
        xend=x2+Xmax/2;
        yend=Ymax/2-y2;
                                                                        putpixel(xstart,ystart,10);
                                                                                delay(100);
                                                                                d=d+ inc1;
        char heading[50],h1[20];
        strcpy(heading,"(ID: ");
                                                                        }
        strcat(heading,itoa(174049,h1,10));
                                                                        xstart++;
        strcat(heading,")");
                                                                }
        outtextxy(200,30,heading);
                                                                while(!kbhit()){
        char st[20],st1[20];
                                                                        delay(100);
                                                                }
        strcpy(st,"(");
        strcat(st,itoa(x1,st1,10));
        strcat(st,",");
                                                        }
```

Result:



Algorithm: Digital Differential Analyzer(DDA)

