## **Implement DDA Line Drawing Algorithm**

```
#include<graphics.h>
#include<stdio.h>
#include<math.h>
#include<dos.h>
int main()
{
   float x,y,x1,y1,x2,y2,dx,dy,step;
   int i,gd=DETECT,gm;
   initgraph(&gd,&gm,"C:\\TURBOC3\\BGI");
    printf("\nEnter the x-coordinate of the first point:");
   scanf("%f",&x1);
   printf("\nEnter the y-coordinate of the first point:");
   scanf("%f",&y1);
    printf("\nEnter the x-coordinate of the second point:");
   scanf("%f",&x2);
   printf("\nEnter the y-coordinate of the second point:");
   scanf("%f",&y2);
   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)
   {
        putpixel(x,y,400);
       x=x+dx;
       y=y+dy;
       i=i+1;
        delay(100);
   }
   getch();
   return 0;
   closegraph;
}
```

Enter the x-coordinate of the first point:15

Enter the y-coordinate of the second point:415

Enter the y-coordinate of the second point:270