Program:

```
//st id: 194028
//report_title: implementation bresenham's circle drawing algorithm
#include<bits/stdc++.h>
#include<graphics.h>
using namespace std;

int x,y;
void drawing(int X,int Y,int h,int k)
{
   int a=x/2,b=y/2;
   putpixel(a+(X+h),b+(Y+k),15);
   putpixel(a+(Y+h),b+(X+k),15);
   putpixel(a+(-Y+h),b+(X+k),15);
   putpixel(a+(-X+h),b+(Y+k),15);

   putpixel(a+(-X+h),b+(-Y+k),15);
   putpixel(a+(-Y+h),b+(-X+k),15);
   putpixel(a+(Y+h),b+(-X+k),15);
   putpixel(a+(X+h),b+(-Y+k),15);
}

int main()
{
   initwindow(800,600,"Screen");
   x=getmaxx();
   y=getmaxy();
   rectangle(0,0,x,y);
   line(0,y/2,x,y/2);
   line(x/2,0,x/2,y);
   int h,k;
   cout<<"Coordinate of center: ";
   cin>>h>>k;
   cout<<"Radius of circle: ";
   int r;
   cin>>r;
   int X=0,Y=r,d=3-2*r;

   while(X<=Y)
   {
      drawing(X,Y,h,k);
      if(d<0)
      {
         d=d+4*X+6;
         X++;
      }
      else
      {
         d=d+4*(X-Y)+10;
         X++;
         Y--;
      }
   }
      while(!kbhit())
      {
         delay(200);
      }
}
```

Output:

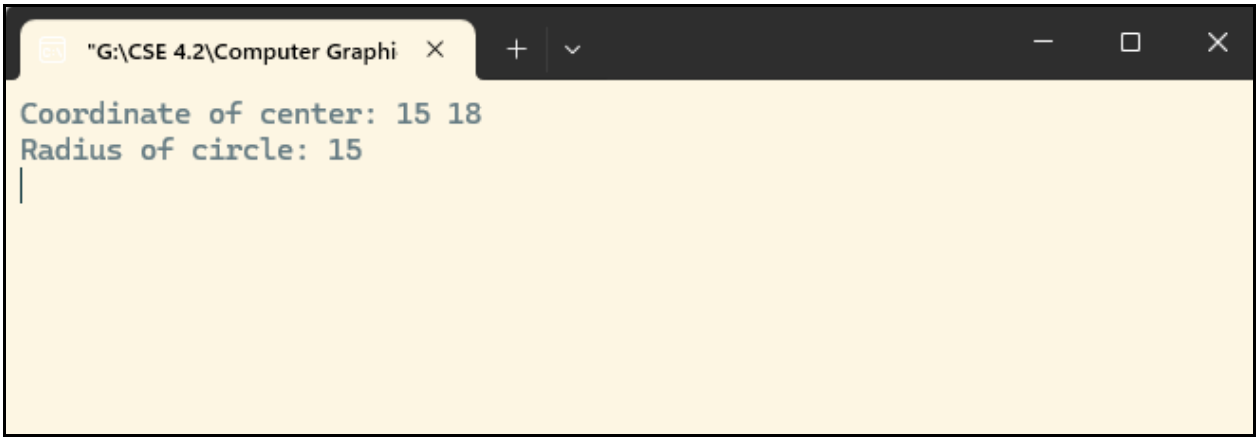

Fig: input initial point and end point

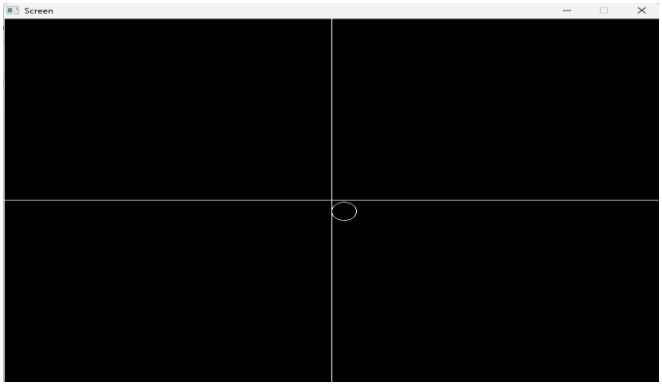

Fig: picture of line drawing