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/*2.Write C++/Java program to draw circle using Bresenham‘s
algorithm. Inherit pixel class.*/
#include<iostream>
#include<graphics.h>
using namespace std;
class pixel
{
public:
  float x0,y0,x1,y1,rd,pk,pk1,p0,x,y;
  void drawCircle(float ,float ,float,float ,float );
  void bresCircle(float , float , float );
}p;
void pixel :: bresCircle(float xc, float yc, float r)
{
  x0=0;
  y0=r;
  pk=3-2*r;
  x=x0;
  y=y0;
  drawCircle(xc,yc,r,x,y);
  while(x<=y)
  {
    x++;
    if(pk<0)
    {
      pk=pk+4*x+6;
    }
    else
    {
      y--;
      pk=pk+4*(x-y)+10;
    }
    drawCircle(xc,yc,r,x,y);
  }
}
void pixel :: drawCircle(float xc, float yc, float r, float x,
float y)
{
  putpixel(xc+x,yc+y,WHITE);
  putpixel(xc-x,yc+y,WHITE);
  putpixel(xc+y,yc+x,WHITE);
  putpixel(xc-y,yc+x,WHITE);
  putpixel(xc+x,yc-y,WHITE);
  putpixel(xc-x,yc-y,WHITE);
  putpixel(xc+y,yc-x,WHITE);
  putpixel(xc-y,yc-x,WHITE);
  delay(50);
}
class point : public pixel
{
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  public:
     void getdata(){
    cout<<"\nEnter the co-ordinates: ";
    cin>>p.x1>>p.y1;
    cout<<"\nEnter the Radius of circle: ";
    cin>>p.rd;
    p.bresCircle(p.x1,p.y1,p.rd);
  }
};
int main(){
  int gd=DETECT,gm;
  initgraph(&gd,&gm,NULL);
  point pt;
  pt.getdata();
  delay(10000);
  closegraph();
  return 0;
}
```

Output:

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/*Circle Co-ordinates: (320,240)
Radius: 220*/
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