

```
import java.awt.*;
import java.io.Serializable;

public class Goal implements Serializable
{
    double radius;
    double x, y;
    boolean reached = false;

    public Goal(double radius, double x, double y)
    {
        this.x = x;
        this.y = y;
        this.radius = radius;
    }

    public void testReached(Comet c)
    {
        if(Math.pow(Math.pow(c.x-x,2) + Math.pow(c.y-y,2), .5) <= radius)
            reached = true;
    }

    public void reset()
    {
        reached = false;
    }

    public void draw(Graphics g)
    {
        if(reached)
            g.setColor(Color.GREEN);
        else
            g.setColor(Color.RED);
        g.drawOval((int)(x-radius+.5), (int)(y-radius+.5), (int)(radius*2+.5),
            (int)(radius*2+.5));
    }
}
```