

Principles Art Project
Bella McKay

1. Describe each of your three rules (30pts)

- 1) In this image, I used my attraction and repulsion code as a base and changed var rad in function loadBalls so that a random point on the (x, y) domain and range would create a line stemming from it, helping me form the triangle shape. I also changed the shape from ellipse to line in render.
- 2) In this image, I used my attraction and repulsion code as a base and made var rad much smaller so that the lines and ellipses that I created in the render function had a low range for motion based on the random length of the lines the balls followed. In the set up function, I removed the random colors and created one color for the image. Lastly, I decreased the number of lines and circles so that each ball could be visible.
- 3) In this image, I used my attraction and repulsion code as a base and changed function loadBalls so that lines from the render function could attract and repulse ball1 with a (400, 500) point. I also changed the velocity and color to make the lines move extremely fast and give a firework effect.

2. Show code for each rule (30pts)

1)

```
function loadBalls(numBalls){  
  for(var i = 0; i < numBalls; i++){  
    var loc = createVector(random(width), random(height));  
    var vel = createVector(random(-3,3), random(-3,3));  
    var rad = random(0,1000);  
    var col = color(66, 244, 158);  
    balls.push(new Ball(loc, vel, rad, col));
```

```
this.render = function (){  
  stroke(this.col);  
  line(this.loc.x,this.loc.y, this.rad, this.rad);  
  
  color(244, 66, 131));  
  loadBalls(3);
```

2)

```
function loadBalls(numBalls){  
  for(var i = 0; i < numBalls; i++){  
    var loc = createVector(random(width), random(height));  
    var vel = createVector(random(-3,3), random(-3,3));
```

```

    var rad = random(400, 500);
    var col = color(244, 66, 131);
    balls.push(new Ball(loc, vel, rad, col));

this.render = function (){
    stroke(this.col);
    line(this.loc.x,this.loc.y, this.rad, this.rad);
    ellipse(this.loc.x,this.loc.y, this.rad, this.rad);

3)
var rad = random(400, 500);
    var col = color(255, 246, 0);

this.render = function (){
    stroke(this.col);
    triangle(this.loc.x,this.loc.y, this.rad, this.rad);
    line(this.loc.x,this.loc.y, this.rad, this.rad);

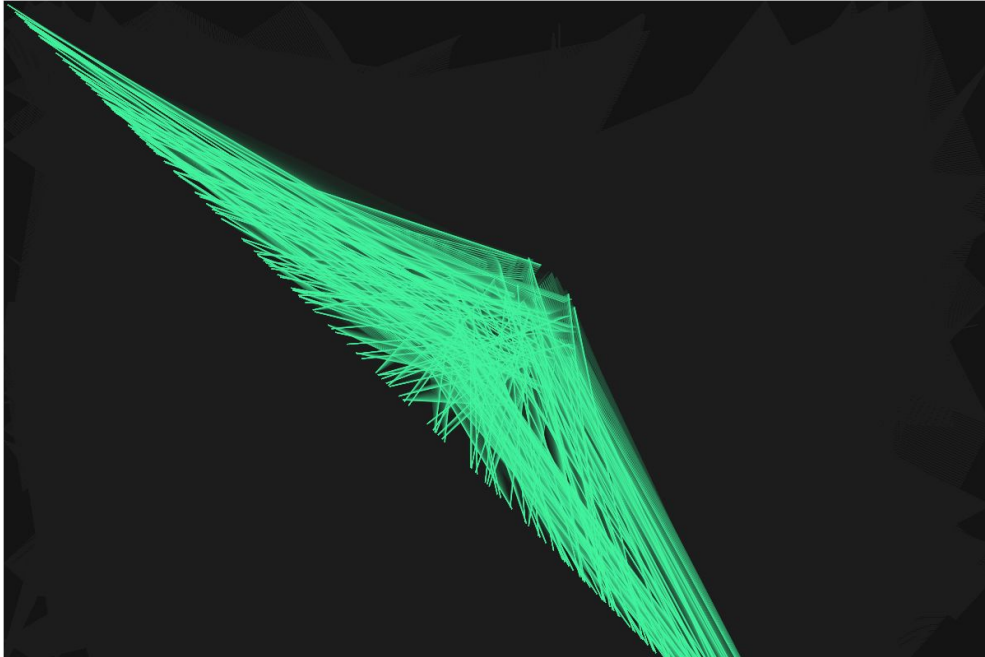
this.vel.limit(15);

    color(255, 246, 0));
    loadBalls(200);

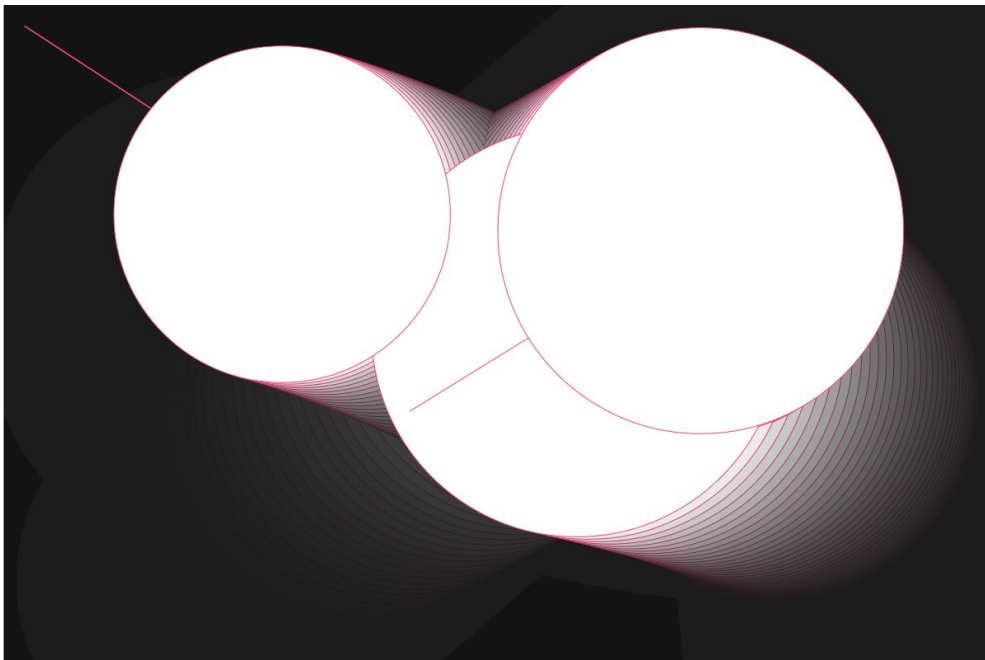
```

3. Show screen shot for each rule (30pts)

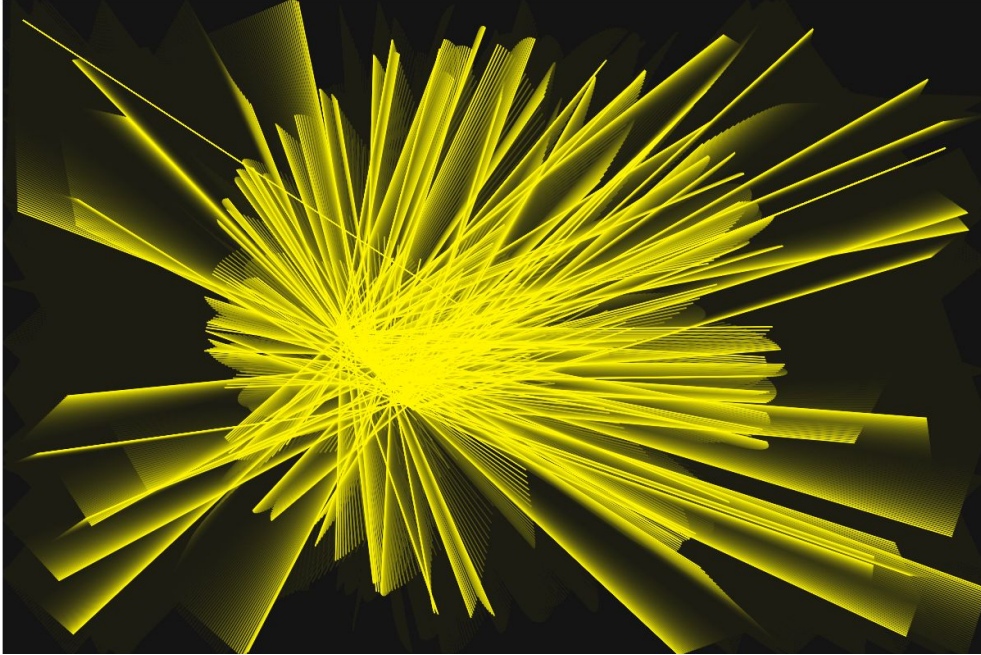
Rule 1 image



Rule 2 image



Rule 3 image



4. Save as PDF and upload to canvas (For credit)