a1

```
int num = 500;

int x[] = new int[num];
int y[] = new int[num];
int d[] = new int[num];
boolean fadeout = true;


void setup(){
 background(255);
 size(600,600);

 for(int i = 0; i< x.length; i++){
  x[i]=(int)random(width);
  y[i]=(int)random(height);
  d[i]=(int)random(20);
 }
//frameRate(60);
}

void draw(){
 if(fadeout == true) {

  //noStroke();
  fill(random(255,0));
 }

 if(fadeout == false){
  background(255);
 }

  /*for(int i = 0; i < 8; i++){
```

```
    ellipse(x[i], y[i], 30, 30);
   fill(255);
   noStroke();


  }

 for(int i = 0; i < x.length; i++){
   ellipse(x[i], y[i], 30, 30);
  fill(255);
  noStroke();

 }*/

 for(int i = 0; i< x.length; i++){
   float newX = map(cos(frameCount/50.0)*sin(frameCount/20.0), -1, 1, x[i],
width/2);
   float newY = map(sin(frameCount/50.0)*sin(y[i]), -1, 1, x[i], height/2);
   rectMode(CENTER);
   ellipse(newX, newY, d[i], d[i]);
    fill(random(255),random(255),random(150,200));
    stroke(255);
    //noStroke();


 }

  }
```