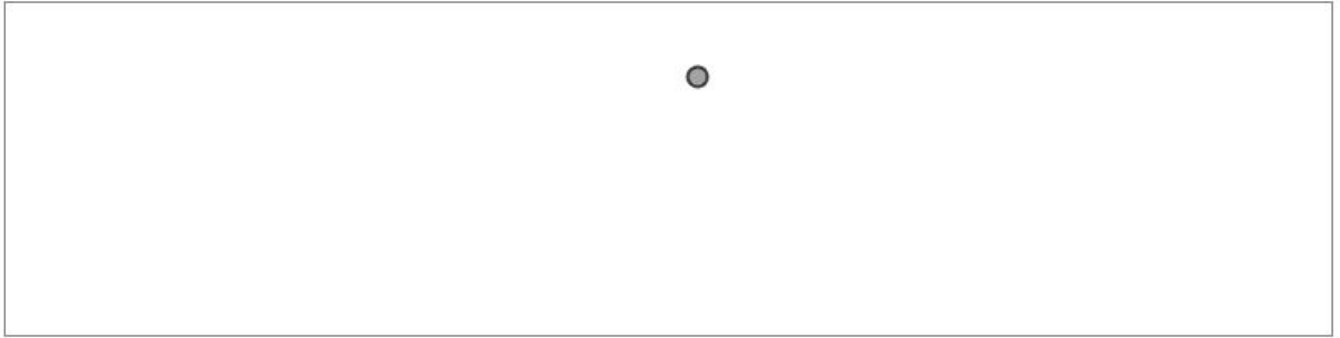


Agente autónomo

-Efecto de caída, y degradado hasta desaparecer



<https://natureofcode.com/book/chapter-6-autonomous-agents/>

-Código:

```
Particle p;

void setup() {
  size(640,360);
  p = new Particle(new PVector(width/2,10));
}

void draw() {
  background(255);
  p.run();
  if (p.isDead()) {
    println("Particle dead!");
  }
}

class Particle {
  PVector location;
  PVector velocity;
  PVector acceleration;
  float lifespan;

  Particle(PVector l) {
    acceleration = new PVector(0,0.05);
    velocity = new PVector(random(-1,1),random(-2,0));
    location = l.get();
    lifespan = 255.0;
  }

  void run() {
    update();
    display();
  }

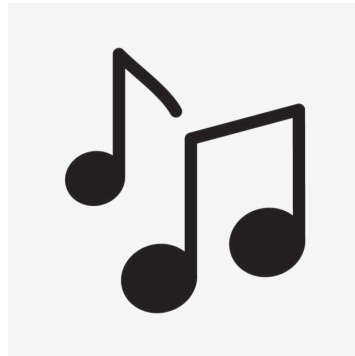
  void update() {
    velocity.add(acceleration);
    location.add(velocity);
    lifespan -= 2.0;
  }

  void display() {
    stroke(0,lifespan);
    fill(0,lifespan);
    ellipse(location.x,location.y,8,8);
  }

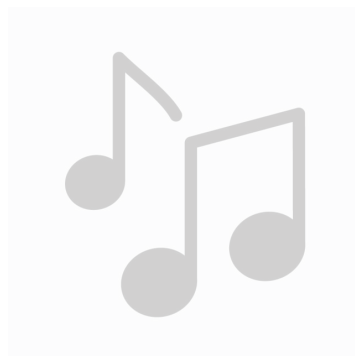
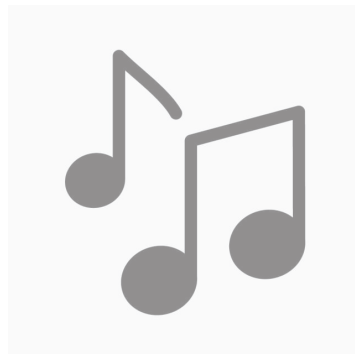
  boolean isDead() {
    if (lifespan < 0.0) {
      return true;
    } else {
      return false;
    }
  }
}
```

-Posible aplicación:

Enfatizar los putos altos y los silencios musicales. Hacia arriba y botando cuando la música sea ascendente, y en caso contrario cuando la música sea descendente.



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