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//      December 9, 2019
var balls = [];
var colors = [];
var numBalls = 20;

function setup() {
  var cnv = createCanvas(800, 800);
  cnv.position((windowWidth-width)/2, 30);
  background(255, 255, 255);
  fill(200, 30, 150);
  createBalls();
  bubbleSort();
  renderBalls();
}

function createBalls(){
  for(var i=0; i < numBalls; i++){
    if(i===0){
      balls[i] = new Ball(39,150);
    }
    else{
      balls[i] = new Ball((i+1)*39,150);
    }
  }
}

function bubbleSort(){
  for (j=0; j<numBalls-1; j++){
    for (i=0; i<numBalls-1-j; i++){
      if (balls[i+1].redClr < balls[i].redClr) {
        var tmp = balls[i].redClr;
        balls[i].redClr = balls[i+1].redClr;
        balls[i+1].redClr = tmp;
      }
    }
  }
}

function renderBalls(){
  for(var i=0; i < numBalls; i++){
    balls[i].render();
  }
}

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}
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class Ball{  
  constructor(x,y){  
    this.loc = createVector(x,y);  
    this.redClr = Math.floor(random(255))  
  }  
}
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run(){  
  this.render();  
}
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render(){  
  fill(this.redClr,0, 0);  
  ellipse(this.loc.x, this.loc.y, 39, 39);  
}  
}
```