Dropping down



In this example, up to 4 small asterisks (the stars) are falling down at various speed.

A star has a speed between 200 and 400, and will appear every half to one and a half seconds.

In the load() function we define the size of the stars (of course, you can also load an image here!) and initialize the random function (nothing is really random in a computer, did you know it?)

The hardwork is done in update(dt).

If there are less than 4 stars, and it's time to create a new star, with a random horizontal position and a random speed (between the allowed boundaries).

And we set a random delay for the next star.

Finally, we move down all the stars in the list and remove the ones that felt out of the screen.

In draw(), we loop through all the stars and *draw* each of them at its current position.

```
stars = {}
star = {speed = {min = 200, max = 400}, nextDelay = 0,
delay = {min = 0.5, max = 1.5}, height = 5, char = '*'}
function love.load(arg)
    love.graphics.setFont(love.graphics.newFont(36))
    math.randomseed(os.time())
end
```

```
function love.update(dt)
  if #stars < 4 then
    if star.nextDelay > 0 then
      star.nextDelay = star.nextDelay - dt
    else
      newStar = {
        x = math.random(0, love.graphics.getWidth() -
                                             star.height),
        v = 0 - star.height
      speed = math.random(star.speed.min, star.speed.max),
                char = star.char
            table.insert(stars, newStar)
            star.nextDelay = math.random(star.delay.min,
                                           star.delay.max)
        end
    end
    for i, star in ipairs(stars) do
        star.y = star.y + (star.speed * dt)
        if star.y > love.graphics.getHeight() then
            table.remove(stars, i)
        end
    end
end
function love.draw()
    for i, star in ipairs(stars) do
        love.graphics.print(star.char, star.x, star.y)
    end
end
```