

# Campfire

Demo: <https://youtu.be/M3tSFmx0cKc>

Go to: <https://makecode.microbit.org/>

Make sure that you have added the Kitronik Halo LED extension (instructions are in Rainbow Rotate).

For each led, pick a 255 red, random green and 0 blue. This will be a colour in between red and yellow.

```
on start
  set haloDisplay to to Halo HD with 60 ZIP LEDs
  for index from 0 to 60
    do
      set greenVal to pick random 0 to 100
      haloDisplay set ZIP LED index to red 255 green greenVal blue 0
```

To make the fire appear to flicker, there are a lot of random movements in the forever loop.

```
forever
  set flicker to pick random 0 to 3
  if flicker = 1 then
    haloDisplay rotate ZIP LEDs by 2
  else
    haloDisplay rotate ZIP LEDs by -1
  haloDisplay set brightness pick random 100 to 255
  haloDisplay show
  pause (ms) pick random 100 to 350
```

Pick a random number

If the random number is 1, move the LEDs 2 forward.

Otherwise, Move the LEDs backwards.

Change the brightness randomly.

Show the changes.

Pause a random amount of time.