

Race

Race demo: <https://youtu.be/ZCAbiLaNGF8>

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

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

In this code, the dots will move randomly so that they appear to race as they go around the oval.

We need two variables:

- redVal and GreenVal

These will trace the position of red and the position of the green dot.



```
on start
  set redVal to 0
  set greenVal to 3
  set haloDisplay to to Halo HD with 60 ZIP LEDs
```

The image shows a screenshot of the MakeCode Microbit editor. It features three red 'set' blocks stacked vertically under a blue 'on start' block. The first block sets 'redVal' to 0, the second sets 'greenVal' to 3, and the third sets 'haloDisplay' to 'to Halo HD with 60 ZIP LEDs'. The background is a light gray grid.

```

forever
  haloDisplay clear
  change redVal by pick random 1 to 4
  if redVal ≥ 60 then
    set redVal to 0
  haloDisplay set ZIP LED redVal to red
  change greenVal by pick random 1 to 4
  if greenVal ≥ 60 then
    set greenVal to 0
  haloDisplay set ZIP LED greenVal to green
  haloDisplay show
  pause (ms) 100

```

Clear old the old position.

For red:

- Pick a new value
- If off the end, re-set it.
- Display the red value in red in its new position.

For green:

- Pick a new value
- If off the end, re-set it.
- Display the red value in green in its new position.

Show the lit up LEDs

Wait a little before the next round.

Show Ms. Gorski when you are done.