

COLOURS



DESCRIPTION

Each pixel in your display actually has 3 Light-Emitting Diodes (LEDs) inside. The Colours in our programs are lists of numbers. These describe the brightness of the Red, Green and Blue LEDs.

MAKING COLOUR VALUES

There are many ways to generate colours for the `setPixel()` command. We can create a list of three numbers less than 256, use the named lists already available or use colour functions to calculate lists for us. Try varying these numbers. What happens?

```
setPixel(0, yellow)
setPixel(1, [255,255,0])
setPixel(2, hueToRgb(0.1666667))
```

```
red
[255, 0, 0]
>>>
```

Type **red** at the prompt, press *Enter*. This named value is a list of numbers **[255, 0, 0]**. After printing it, the REPL loops back to showing the `>>>` prompt. Try other colours. What do you notice?

```
darkenRgb(red)
[31, 0, 0]
>>>
```

Type **darkenRgb(red)** and press *Enter*. Note that capitalisation of `darkenRgb` matters. Can you send darker colours to your display?

```
hueToRgb(0.5)
[0, 255, 255]
>>>
```

Type **hueToRgb(0.5)** and press *Enter*. Note that capitalisation of `hueToRgb` matters. Try changing the number from 0.5? Can you send these colours to your display?



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