

Pixels and Colors

Basic color representation and pixel creation in `julia`.

```
• using PlutoUI
```

```
• using Images
```



```
• # Single pixels ... in a row
• begin
•     blk = RGB(0, 0, 0)
•     whi = RGB(1, 1, 1)
•     red = RGB(1, 0, 0)
•     gre = RGB(0, 1, 0)
•     blu = RGB(0, 0, 1)
•     rowImage = [blk whi red gre blu]
• end
```

Array{RGB{Normed{UInt8,8}},2}

```
• typeof(rowImage)
```

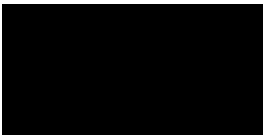
RED level: `r_lvl`



GRE level: `g_lvl`



BLU level: `b_lvl`



```
• [ RGB(r_lvl, g_lvl, b_lvl) Gray(RGB(r_lvl, g_lvl, b_lvl)) ]
```

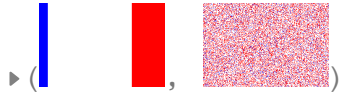
Image from Data

Basic image creation from data



```
• hcat(
•     fill(red, (1, 3)),
•     fill(gre, (1, 1)),
•     fill(blu, (1, 2))
• )
```

```
• using Random
```



```
• begin
•     tmp = hcat(
•         fill(blu, (200, 21)),
•         fill(whi, (200, 200)),
•         fill(red, (200, 79)),
•     )
•     tmp, shuffle(tmp)
• end
```

```
• begin
•     save("01-example-01-ordered.png", tmp)
•     save("01-example-02-shuffled.png", shuffle(tmp))
• end
```