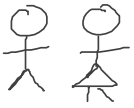




# Encoding



Logical

true false

1 0

Numbers

1 2 3  
decimal / Base 10

111011011

binary / Base 2

Characters

'A' 'B' '#' '?'

characters

ASCII

111011 1011

Picture / Image



Picture Elements

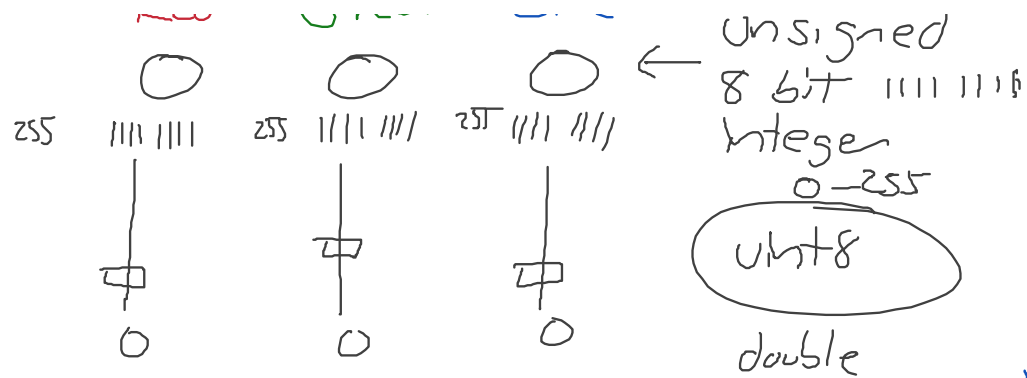
Pixels

Coord  
Position  
x, y  
c, r

Color

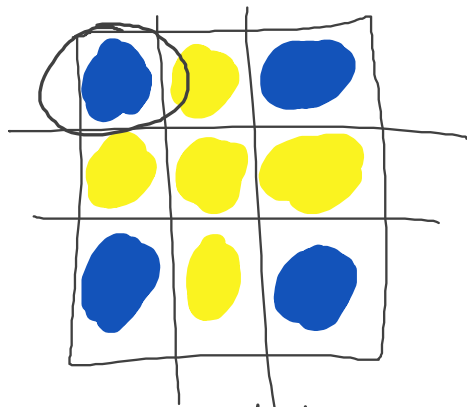
R G B

Red Green Blue



| Color     |               | R   | G   | B   |
|-----------|---------------|-----|-----|-----|
| Primary   | Red           | 255 | 0   | 0   |
|           | Green         | 0   | 255 | 0   |
|           | Blue          | 0   | 0   | 255 |
| Secondary | Magenta       | 255 | 0   | 255 |
|           | Cyan          | 0   | 255 | 255 |
|           | Yellow        | 255 | 255 | 0   |
| $r=g=b$   | Black         | 0   | 0   | 0   |
|           | White         | 255 | 255 | 255 |
|           | Med Gray/Grey | 128 | 128 | 128 |
|           | Dark Gray     | 64  | 64  | 64  |
|           | Light Gray    | 215 | 215 | 215 |

3x3 Pixels



'myPic.jpg'

`pic = imread('myPic.jpg')`

1

2

3

|     |     |     |
|-----|-----|-----|
| 0   | 255 | 0   |
| 255 | 255 | 255 |
| 0   | 255 | 0   |

|     |     |     |
|-----|-----|-----|
| 0   | 255 | 0   |
| 255 | 255 | 255 |
| 0   | 255 | 0   |

|     |   |     |
|-----|---|-----|
| 255 | 0 | 255 |
| 0   | 0 | 0   |
| 255 | 0 | 0   |

`pic(1,1,1)`

`pic(1,1,2)`

`pic(1,1,3)`

r, c, layer

r, c, layer

r, c, layer

↑ ↑

Row, Col

color