

Colour in Processing

Exercise 1

What are the colours produced by the following values? Are the colours from the grayscale or RGB colour model?

(a) (255)

Answer:  White - Grayscale value

(b) (125,125,125)

Answer:  Gray - RGB value (grayscale shades are representable in the RGB colour scheme too)

(c) (255,255,0)

Answer:  Yellow - RGB value

(d) (200,50,150)

Answer:  Dark Pink-ish - RGB value

Exercise 2

Write (r,g,b) values to approximately represent the following colours:

(a)  Black

Answer: (0,0,0)

(b)  Dark Blue

Answer: (0,0,100)

(c)  Cyan

Answer: (0,255,255)

(d)  Orange

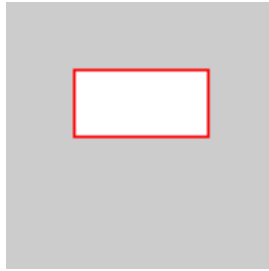
Answer: (255,125,0)

Exercise 3

Write Processing code to produce the following output.

Use the `stroke()` and `fill()` functions as appropriate!

(a) A rectangle with a red outline



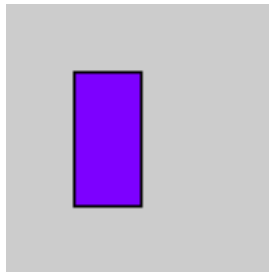
Solution

```
# CMPT 140 - Colours in Processing
# Topic: Colouring Shapes
# Part (a)
```

```
stroke(255,0,0)
rect(25,25,50,25)
```

This code can be found in: [cmpt140-ch05-py/cmpt140_ch05_colouring_shapes_3a/cmpt140_ch05_colouring_shapes_3a.pyde](#)

(b) A rectangle with a purple fill



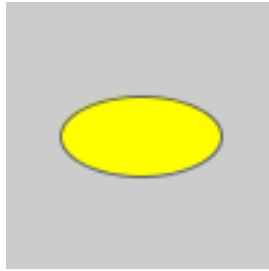
Solution

```
# CMPT 140 - Colours in Processing
# Topic: Colouring Shapes
# Part (b)
```

```
fill(125,0,255)
rect(25,25,25,50)
```

This code can be found in: [cmpt140-ch05-py/cmpt140_ch05_colouring_shapes_3b/cmpt140_ch05_colouring_shapes_3b.pyde](#)

(c) An ellipse with a dark gray outline and yellow fill



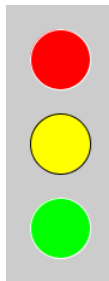
Solution

```
# CMPT 140 - Colours in Processing  
# Topic: Colouring Shapes  
# Part (c)
```

```
stroke(100,100,100)  
fill(255,255,0)  
ellipse(50,50,60,30)
```

This code can be found in: `cmpt140-ch05-py/cmpt140_ch05_colouring_shapes_3c/cmpt140_ch05_colouring_shapes_3c.pyde`

(d) Three circles for a traffic light. **Note:** the red and green circles have a white outline!



Solution

```
# CMPT 140 - Colours in Processing
# Topic: Colouring Shapes
# Part (d)
```

```
size(90,230)

stroke(255,255,255)
fill(255,0,0)
ellipse(45,45,50,50)

stroke(0,0,0)
fill(255,255,0)
ellipse(45,115,50,50)

stroke(255,255,255)
fill(0,255,0)
ellipse(45,185,50,50)
```

This code can be found in: [cmpt140-ch05-py/cmpt140_ch05_colouring_shapes_3d/cmpt140_ch05_colouring_shapes_3d.pyde](#)