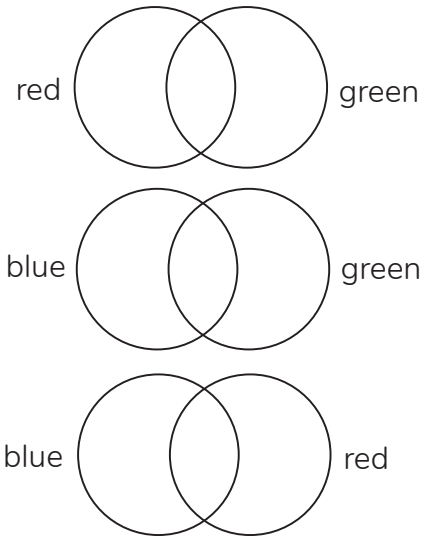
Date: _____ Name: _____

Code a Colour Mixer

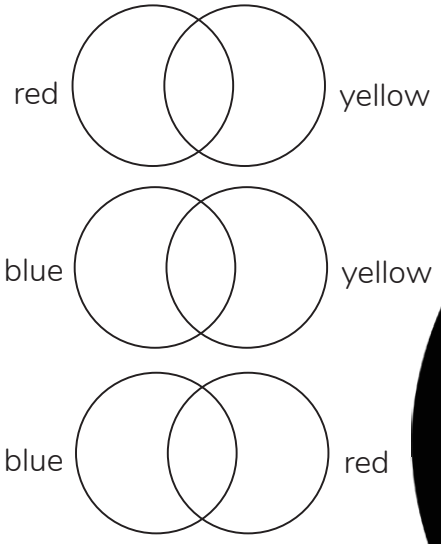
This activity was created by Habiba.

Using the **additive colour theory** and **subtractive colour theory**, color in the colours of light or pigment below, as well as the resulting shade of each mix. Then fill in the blanks in the code below to make your own colour mixing algorithm!

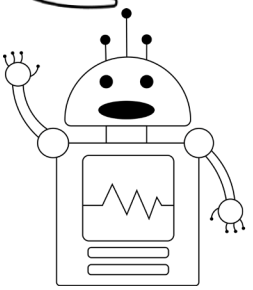
LIGHT



PIGMENT



The way a computer displays colour on a screen is different than the way colour works on a printed page. On a screen, pixels use **additive colour**: starting from black, light is added to produce colour (more light = lighter colours). In print, inks and pigments are an example of **subtractive colour** - starting from a white page, inks filter out some of the white light hitting the page (more ink = darker colours)



```
colour1 = input("Enter the first colour")
colour2 = input("Enter the second colour")
colourType = input("Enter whether LIGHT or PIGMENT")

if (colourType == "LIGHT")
     additiveColour (colour1, colour2)

else if (colourType == "PIGMENT")
     subtractiveColour (colour1, colour2)

additiveColour {

if (colour1 == "green" and colour2 == "red") or (colour1 == "red" and
colour2 == "green")
     newColour =

else if (colour1 == "green" and colour2 == "blue") or (colour1 == "blue"
and colour2 == "green")
     newColour =

else if (colour1 == "blue" and colour2 == "red") or (colour1 == "red" and
colour2 == "blue")
     newColour =
}
```


SLO: 8-2-04, 8-2-05