

# CoderDojo Athenry

## "Above all, be cool"



### Every week:

- ✓ Sign in at the door

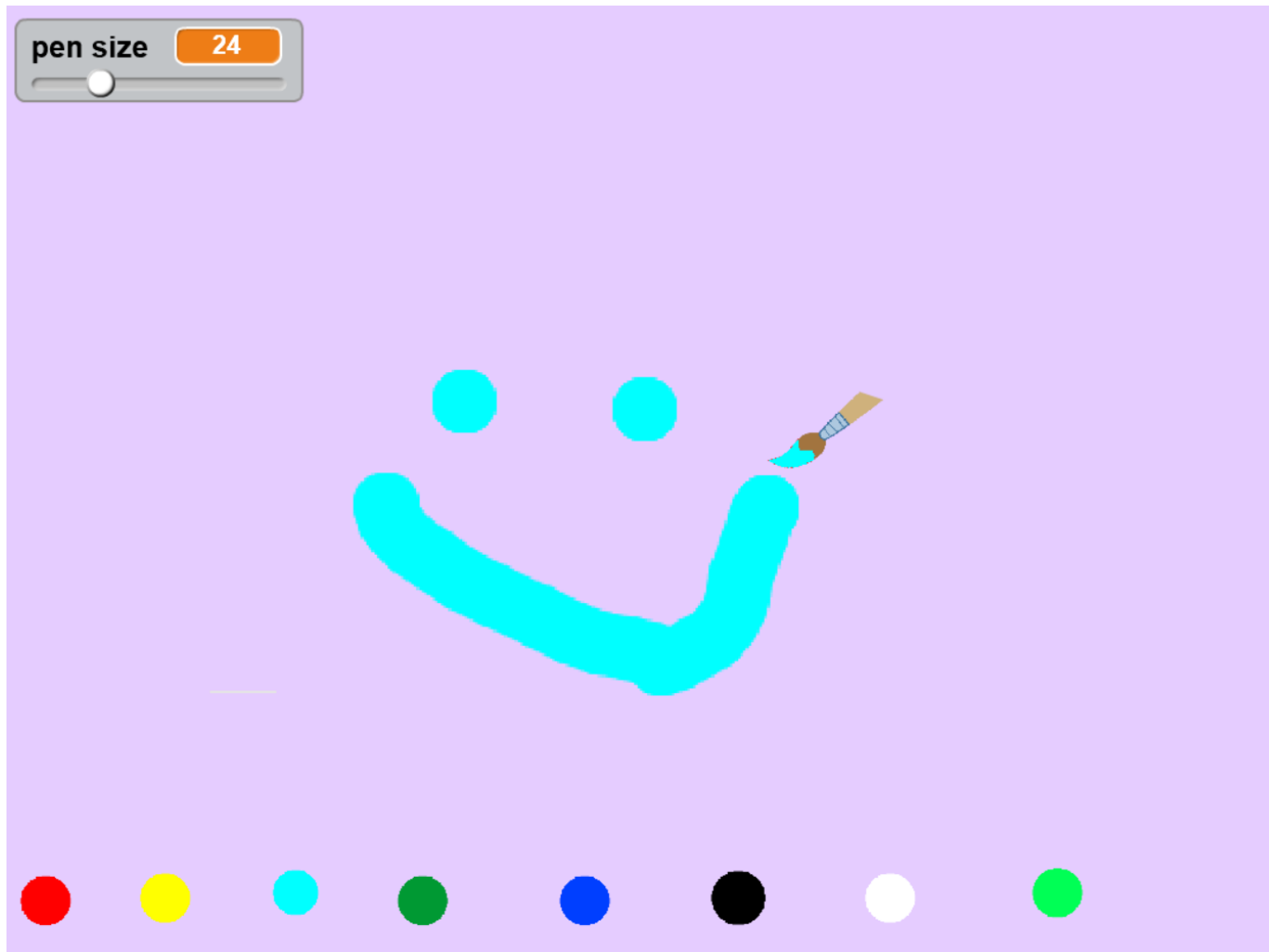
### If you are new:

- ✓ Fill in Registration Form
- ✓ Ask a Mentor how to get started

Make sure you are on the Athenry Parents/Kids Google Group: email [coderdojoathenry@gmail.com](mailto:coderdojoathenry@gmail.com)

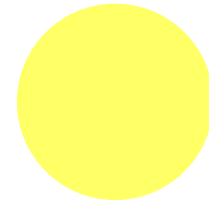
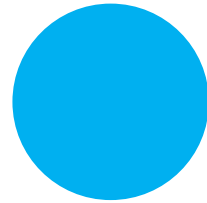
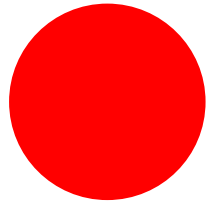
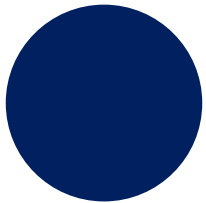
**Wifi: coderdojowireless**

# Today's Challenge: Making a Paint Program



Lets get started

Draw each Colour as a *Sprite*



Don't have to be a *Circle*

Can be any shape

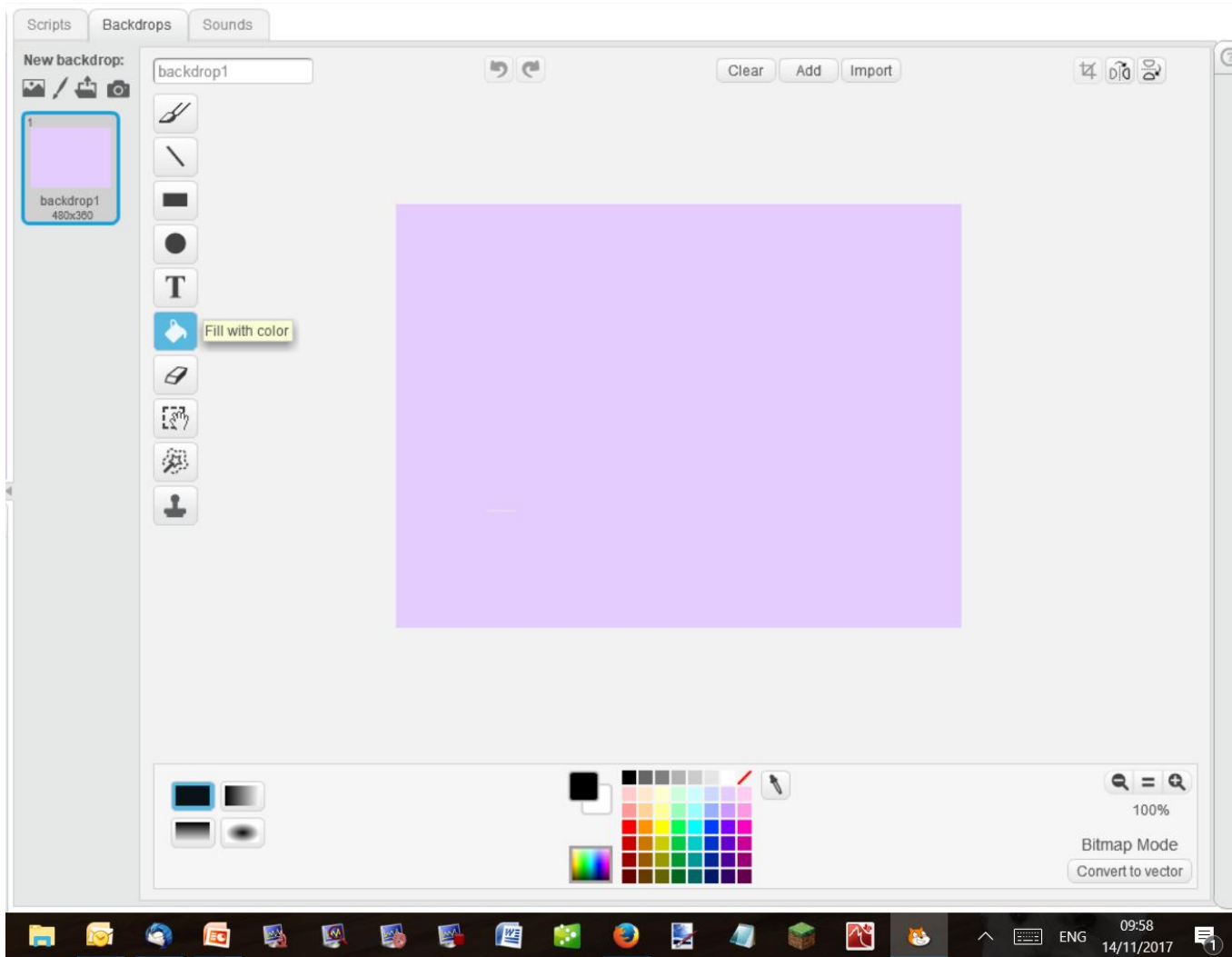


# Creat One than Duplicate and change Colour



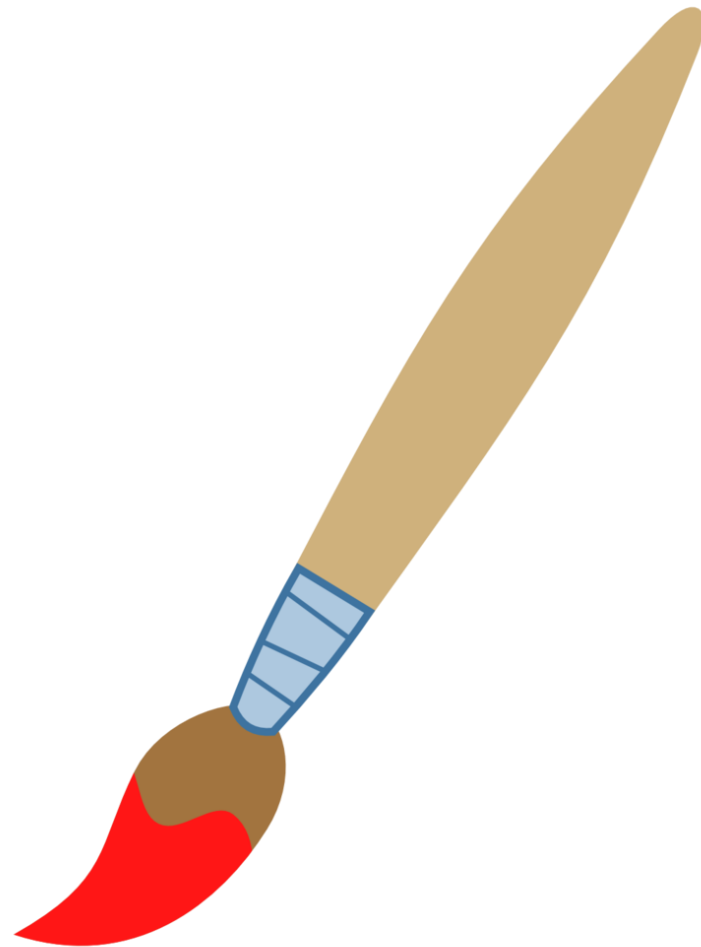
# Create a Plain Colour Background

Tip:  
Not  
too  
Dark

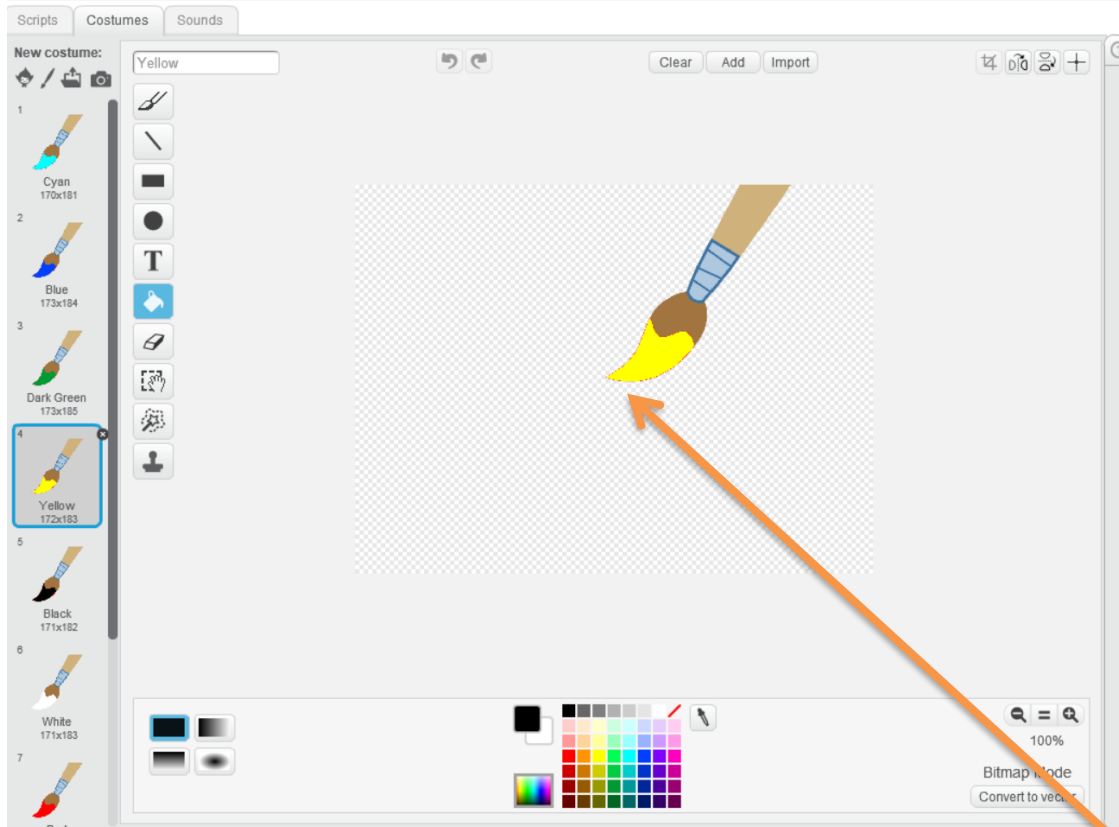


# Now for the *Paintbrush* *Sprite*

Can use  
Pencil from  
Library or  
Get Paintbrush  
from the  
Internet



# Create a Costume for Each Colour and NAME IT!

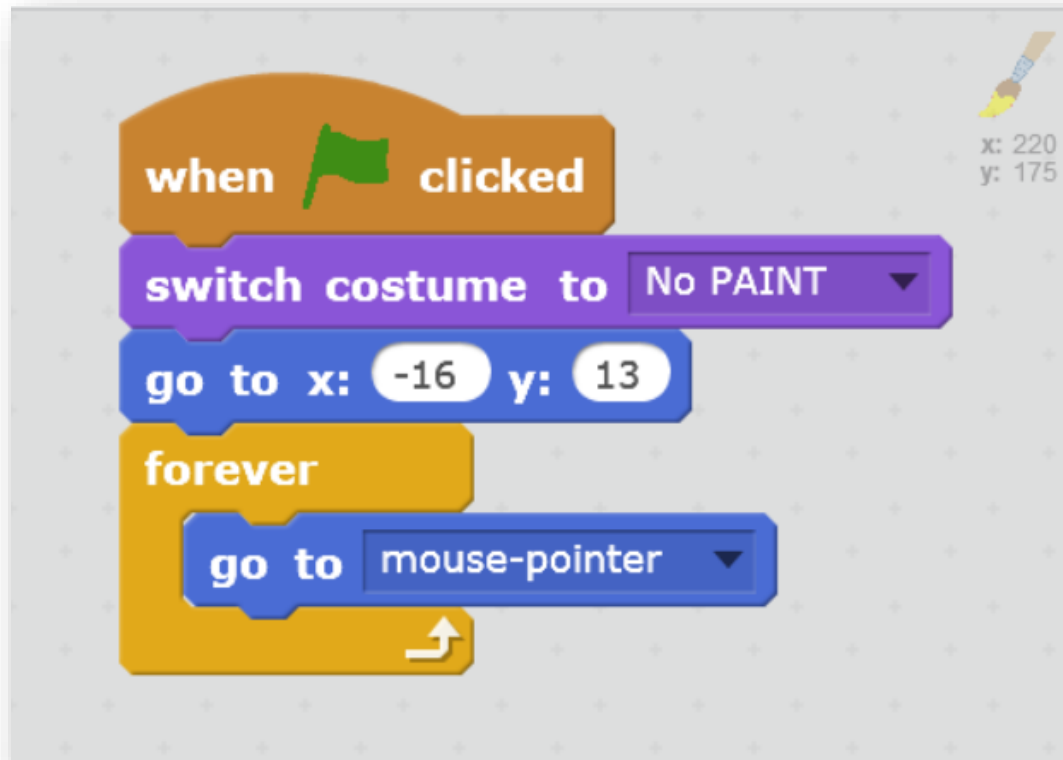


Have one with NO  
Paint as well as one  
for each

Colour

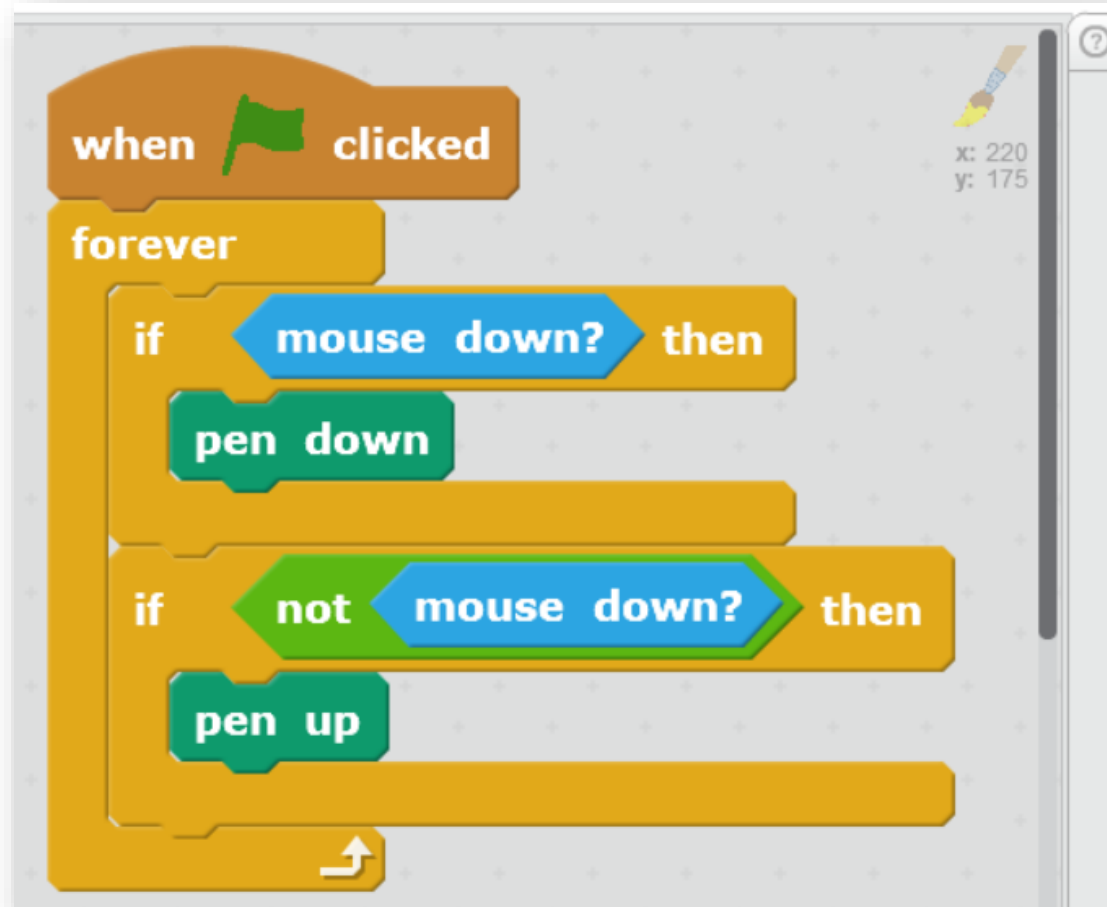
Must Centre on Tip

# Now the Code!

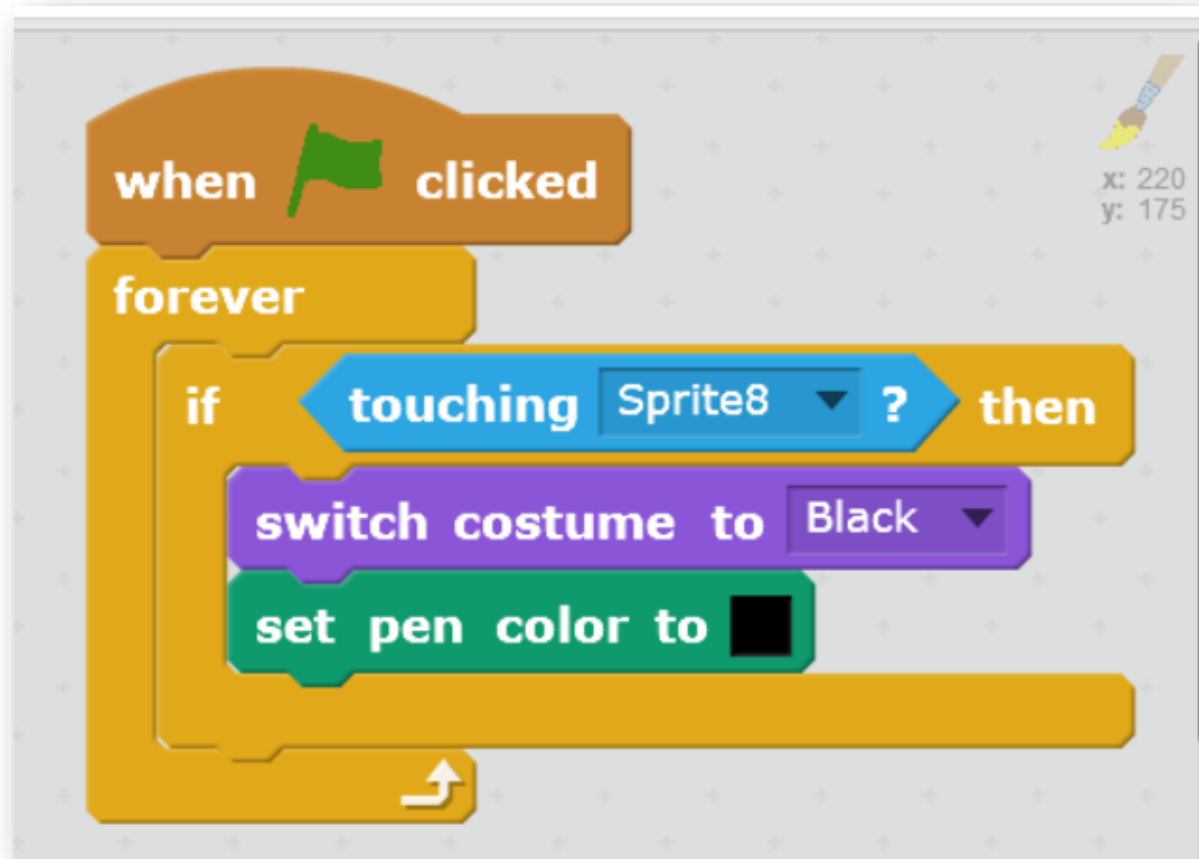




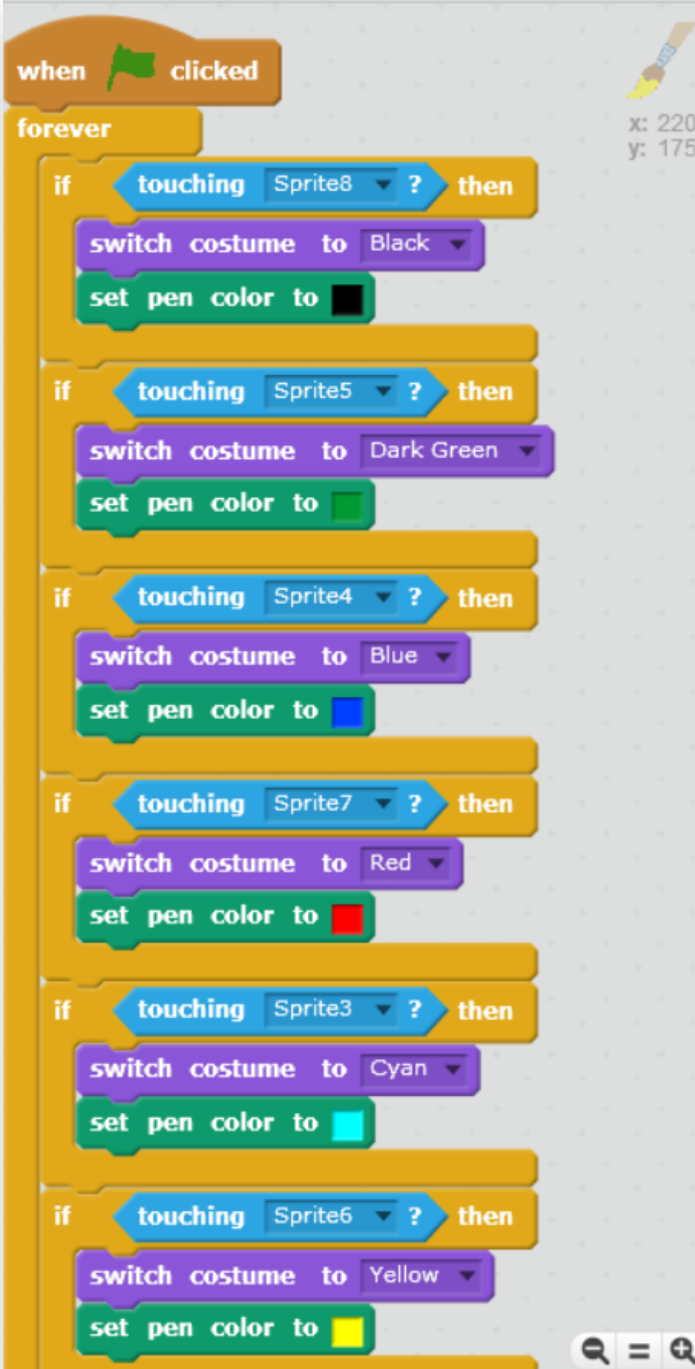
# Now the Code to Make the Brush Paint!



# Now the Code to Make the Brush Change Colour and Costume!



Do  
this  
for  
each  
Colour



The image shows a Scratch script starting with a 'when clicked' event block. This is followed by a 'forever' loop containing six 'if touching' blocks. Each 'if touching' block checks for a specific sprite (Sprite8, Sprite5, Sprite4, Sprite7, Sprite3, and Sprite6) and, if touched, performs two actions: switching the costume to a specific color and setting the pen color to that same color. The colors used are Black, Dark Green, Blue, Red, Cyan, and Yellow. The script is positioned on a grid with coordinates x: 220 and y: 175. A paintbrush icon is visible in the top right corner, and a search icon is in the bottom right corner.

```
when clicked
forever
  if touching Sprite8 ? then
    switch costume to Black
    set pen color to Black
  if touching Sprite5 ? then
    switch costume to Dark Green
    set pen color to Dark Green
  if touching Sprite4 ? then
    switch costume to Blue
    set pen color to Blue
  if touching Sprite7 ? then
    switch costume to Red
    set pen color to Red
  if touching Sprite3 ? then
    switch costume to Cyan
    set pen color to Cyan
  if touching Sprite6 ? then
    switch costume to Yellow
    set pen color to Yellow
```

# To Change Pen Size Create a Variable

The image shows the Scratch 'Data' panel. At the top, there is a 'Data' tab and a 'More Blocks' button. Below this, there is a 'Make a Variable' button. A variable named 'pen size' is listed with a checked checkbox. Below the variable list, there are four orange control blocks: 'set pen size to 0', 'change pen size by 1', 'show variable pen size', and 'hide variable pen size'. At the bottom of the panel, there is a 'Make a List' button.

## Set as Slider

The image shows a Scratch slider control for the 'pen size' variable. The slider is currently set to the value 24. A context menu is open over the slider, listing several options: 'normal readout', 'large readout', 'slider' (which is highlighted), 'set slider min and max', and 'hide'.

## Code to Add to Paintbrush Sprite

The image shows a Scratch code block for a paintbrush sprite. It starts with a 'when green flag clicked' block. Below it is a 'forever' loop block. Inside the loop, there is a 'set pen size to pen size' block, which is a green block that updates the 'pen size' variable to its current value. The loop block has a small arrow at the bottom right, indicating it repeats indefinitely.

Need to be able to Erase what youve  
done **CLEAR!**



# SAVE & SHARE!

**Upload to the Scratch Website**

***Scratch.mit.edu***

***Username: ExplorersAthenry***

***Password: athenry2022***