Lab: Day 2b

Project: Chromakey
Exercise 5: Chromakey

Define the function \texttt{chromakey(source, background)}, which takes in a source picture & replaces the green with the background picture!

	extbf{Instructions:}
You can find the pictures we took of you yesterday in front of the green screen on our website:

\texttt{inst.eecs.berkeley.edu/~cs98-to}

under the \texttt{chromakey} folder! They are “.png” files! Keep this in mind when loading the file.

Important: Your background has to be at least the size of your source.

****you can crop and scale both pictures to be the same size!****

\textbf{The Big Picture:} Trace through two pictures at the same time, and only replace a pixel of the original picture with the background picture if it is close enough to the color green eventually putting yourself in a really cool place!
Here’s an example in pseudocode:

```python
def chromakey(source, background):
    for each y #do the rows
        for each x #do the columns
            get source pixel sourcePX
            if color of the sourcePX IS green #???
            get background pixel’s color
            set color of sourcePX to be the background color
```

How to we check for green?

```python
if(getRed(p)+getBlue(p)< factor*getGreen(p) and getGreen(p) >num):
    Mess around with num and factor to get best possible result!
```
Bonus Exercises

• Write a function `notAllowed(picture)` that takes in a picture and creates a red circle with a cross through it. It should be around some action or object that is *not allowed*. Like so:

You might need to take in additional arguments, such as a radius and a center of the picture.

• Write a function `halfTint(picture)` that takes in a picture and makes half of the picture more red, and half of the picture more blue.

• Write a function `tripleTint(picture)` that takes in a picture and makes 1/3 of the picture more red, and 1/3 of the picture more blue and the last 1/3 of the picture more green.