Image Filter

In this problem, we are going to create a new image filter called the *Narok Filter.*





Recall that a pixel can be represented by 3 integers between 0 and 255, representing its red, green and blue components. A pixel's 'average component' is just the average of its red, green and blue components, which can be calculated by adding them all together and dividing by 3.

The idea behind the Narok filter is to replace each *bright* pixel in an image with its grayscale equivalent. A *bright* pixel in an image is defined as a pixel whose average component is greater than 153 (which is 60% of 255). All non-bright pixels in the image should remain unchanged.

To make a pixel grayscale, simply set each of its red, green and blue components to be equal to its average component.

**Tip!** As a first step in a program like this, we recommend defining a function to get the average component of a pixel. This is a calculation you'll find yourself needing to do repeatedly.