

# Brightness & Contrast

## Brightness adjustment

- $\text{pixel}' = \text{pixel} + \text{constant}$
- We simply add a constant to all pixel values
- The bigger the constant, the bigger the increase in brightness, and vice versa.

## Contrast adjustment

- $\text{pixel}' = \text{pixel} * \text{constant}$
- We simply multiply a constant to all pixel values
- The bigger the constant, the bigger the contrast increase, and vice versa

## Limits

- For both brightness and contrast adjustment we need to check boundaries, that is make sure that through our adding or multiplying, we don't end up with pixel values that are greater than 255.