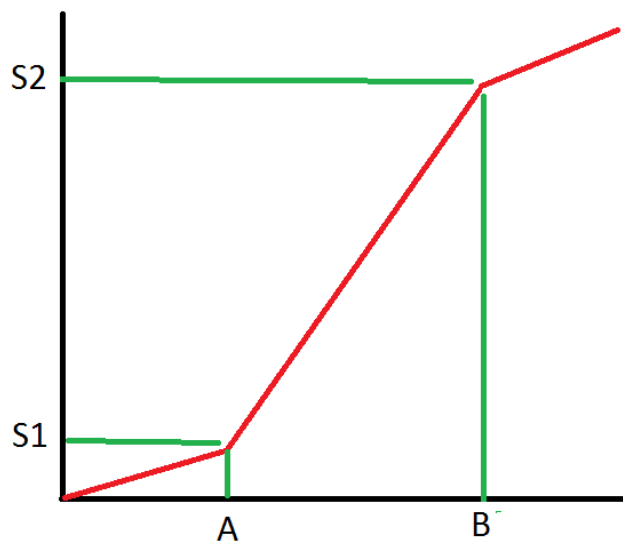# Image Processing

Assignment One

This assignment aims at using basic grayscale mappings to improve image quality.

Assume we want to contrast stretch grayscale images using piecewise linear mappings. Your program should accept the name of the input image and the lower and upper ranges to define the piecewise linear mapping. Then the grayscale values are mapped accordingly and the new image is displayed on the screen.

Inputs:

1- Image: Can be a grayscale or color image. If the image is a color image, it should be converted into grayscale
2- A, B, S1, and S2 as shown in the figure below

Deliverable:

The Python code implementing the grayscale mapping. You should use OpenCV for processing image data. Include Necessary comments in your code to clarify it