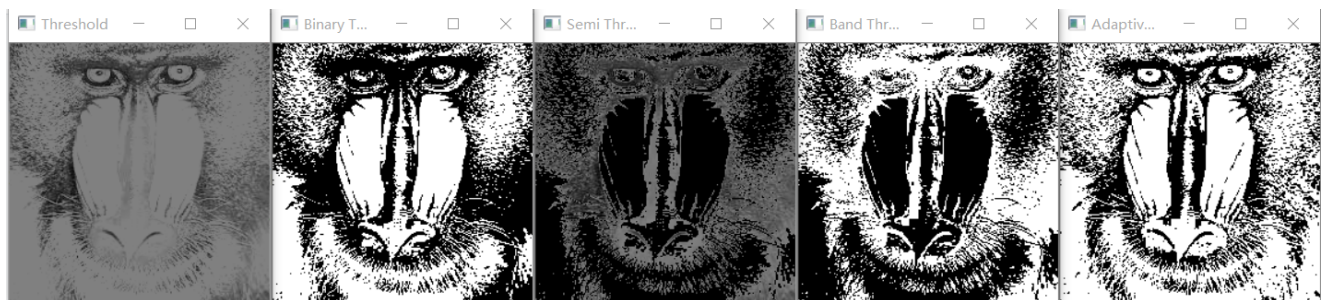Original

This is the original picture which is my input of my python.

Threshold   binary_threshold   Semi_threshold   Band_threshold   adaptive_threshold

Threshold_value is a defined threshold value. If a pixel value is beyond this value, it's value will be replaced by a value(in the above picture is 255).If the pixel value of the picture is beyond threshold value, it would be replaced by 255.

Binary_Threshold is a method which convert image only in white and black color(each pixel will only be 0 or 255). So, image Binary is only in black and white

Band thresholding is a image band image from Binary_Threshold method and Binary_Threshold method

Semi_threshold can send pixels that are relatively close to black or white to 0 or 255, and medium intensity pixels are scaled towards 0 and 255 to make up the vacated space in the intensity spectrum

adaptive_threshold will extract a area and compare the mean value(or other methods) in this area with a pixel in order to define its value. Using this function means threshold value is not a const value but a dynamic suitable value.