

CS116 – Lab 2A

Due Date: September 12

Purpose: Python can also be used to manipulate pictures. You can use loops to change the colors of all of the pixels that make up the picture, creating interesting effects.

Knowledge: This lab will help you become familiar with the following content knowledge:

- How loops can iterate over all the pixels of a picture
- How pixels are comprised of red, green, and blue components

Task: Before starting this lab, you should have read Chapter 4 in your text. Follow the steps in this lab carefully and complete the assignments.

Assignment 1:

Write a function `keepBlue(picture)` that modifies all the pixels in the picture to keep just the blue value. This means that you will need to set the green and red values to zero.

Criteria for Success: If you show your picture after applying your function, you will observe that your picture is all in shades of blue.

Assignment 2:

Write a function `maximizeBlue(picture)` which modifies all the pixels in the picture to change the blue to its maximum value of 255. Use indices to access the pixel elements this time.

Criteria for Success: If you show your picture after applying your function, you will observe that your picture has a strong blue tint.

Submit your file containing your functions Please indicate both partner names in your submission.