

CPS106 Assignment 2

Learning Objectives:

The learning objectives of this assignment are:

- 1) To write more advanced image manipulation functions in Python.
- 2) To use nested loops, decisions and functions in Python.

Two items to hand in:

- 1) Your python program as a .py program. **(-5 points if missing)**

Your python program should use in a creative way the functions for at least **three** of the following image manipulations: mirroring, cropping, making a collage, blending, blurring, background substitution, and changing pixels based on distance function.

- 2) A pdf document **(-5 point if missing, -2 points if present but in another format like .docx, .pages, .rtf, .txt, .py)**. The document should contain:
 - 1) Discussion of what you are doing and itemizing the three advanced manipulations you did. **(-2 points if missing)**
 - 2) the input image(s) **(-2 points if missing)**
 - 3) snippets of your code with English text explaining what you are doing **(-2 points if missing)**
 - 4) the output image(s) **(-2 points if missing)**

Note: You cannot use any other image manipulation library other than PIL; you cannot use numpy or any other library (except math is okay). You can only use what we have learned so far in this course. Although discussion with others is allowed, you must write your own code. You cannot use an AI (such as a chatbot) to write your code.

Marking: 10 points for doing what is required. Possible deductions are mentioned above.