CSC 3141 - IMAGE PROCESSING PRACTICAL (2022/2023)
Assignment 03 - Introduction to OpenCV

Due date: March 5th 2024, 11.59 PM

This assignment requires you to practice using the basics of OpenCV-Python library to do simple tasks with python.

You are required to submit the python script **DO NOT submit the answers using a zip file**. Directly upload the file into your submission thread.

1. Design a simple command line user interface to detect the squares having the user selected color. (See the Figure 1). User should be able to select one of the colors from the below list.

   blue, red, green, yellow, orange, purple, grey

   You may use your knowledge on HSV color model and `cv2.inRange(), cv2.cvtColor()` functions. You should also handle the case sensitivity issues arise from the user entered response. (ie. For an example, Blue, BLUE and bLUE should be resolved to the available color 'blue')

Figure 1: Example output for user selected color 'blue'