Reading Material

Resources:

- OpenCV with Python
  - Introduction to OpenCV [Click Here]
  - GUI Features in OpenCV [Click Here]
  - Core Operations - Basic and Arithmetic Operations on Images [Click Here]
  - Image Processing in OpenCV - Changing Colorspaces, Image Thresholding, Contours in OpenCV [Click Here]

Note: Image processing tutorials created by e-Yantra are also available on the portal under the ***Resources*** tab.

Practice Exercises (Not Evaluated):

1. Color Detection:

Problem Statement: Write a python program which returns number of objects of the same color.

Input: An image file having objects of 3 colors - Red, Green and Blue.
One sample image named *"input_image1.png"* is given in the *Resources* folder. You can create more sample images for testing your program.

Output: Python List having count of objects.
List should be in the order: Red, Green, Blue.

Example Output for *input_image1.png:* [5,4,2]

2. Shape Detection:

Problem Statement: Write a python program which returns the number of objects having the same shape.

Input: An image file having objects of 3 shapes - Triangle, Square and Circle.
One sample image named *"input_image1.png"* is given in *Resources* folder. You can create more sample images for testing your program.

Output: Python List having count of objects.
List should be in the order: Triangle, Square, Circle.

Example Output for *input_image1.png:* [3,4,4]