

Assignment 6 – Report Part 3

The image segmentation / color quantization has been done in python using opencv.

This exercise has been implemented in **Ubuntu Operating System**.

Steps to install opencv with python in Ubuntu (Refer Link):

<http://www.pyimagesearch.com/2015/06/22/install-opencv-3-0-and-python-2-7-on-ubuntu/>

To compile and run the program:

```
python image_segment.py
```

Please make sure that the images are in the same folder as in the program.

Also, specify the image name in 3rd line of the program. Similarly, specify the name of the output image in 21st line of the program.

Output:

Two observations has been taken with $k = 4$ and $k = 25$.

In $k = 4$, there are four colors in the image, whereas in $k = 25$, colors found are 25. You can find the output image in their folders.