MO446 – Introduction to Computer Vision
Project 0

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1. The following image (Figura 1) was used to perform all the exercises, as specified it is colored, rectangular and its type is .PNG.

Figure 1: p0-1-0

2. (a) PNG colored pictures has three channels of color, the Red, Green and Blue, the image (Figura 2) was obtained by swapping the values of the red channel with the blue channel, the green channel was left untouched.

   (b) Monochrome or grayscale images are composed by one single channel which ranges from 0 to 255, thus all it takes to create a monochrome image from the green channel is to copy the green channel values, the result can be seen in Figura 3

   (c) Similar to the question above, except the red channel is used instead, result in Figura 4

Figure 2: p0-2-a-0

(d) The image made from the green channel looks more like what we expected, probably because of our nature sensibility to the green color, hence using it to create a image looks more aligned with what a human would expect.

3. Q 3

4. (a) Q 4a
   (b) Q 4b
   (c) Q 4c

5. (a) Q 5a
   (b) Q 5b
   (c) Q 5c

Figure 3: img-green

Figure 4: img-red

Figure 5: p0-3-0

Figure 6: p0-3-1

Figure 7: p0-4-b-0

Figure 8: p0-4-c-0

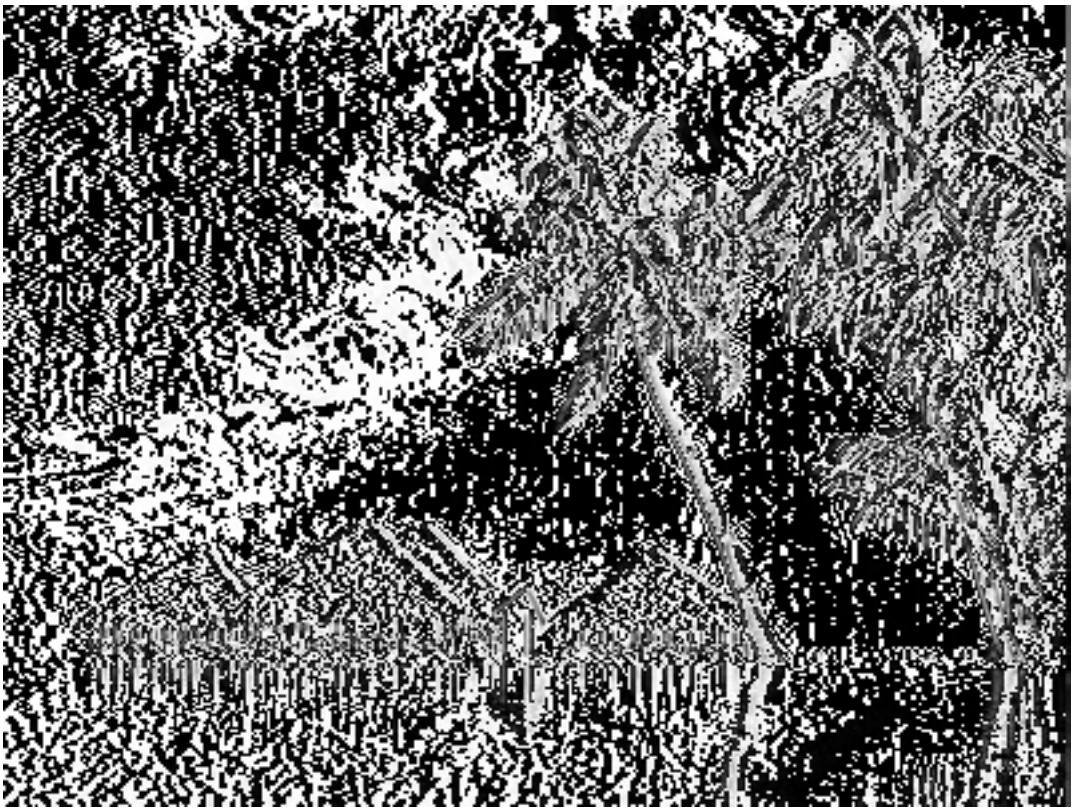

Figure 9: p0-4-c-1

Figure 10: p0-5-a-0

Figure 11: p0-5-b-0