

[Material from the second part of the talk can be found at the following address:
<https://github.com/shayan-najd/QFeldspar/tree/master/Examples/DSLDISS>]

Exercise 1:

Rewrite the grayscale algorithm such that it transforms colored images (normal input) to black and white images. An image can be transformed to black and white, by comparing the grayscale value of pixels against a threshold (e.g. 130) to set all channels to 0 (black colour) or 255 (white colour).

[hint: the answer can be written by adding only one line to the existing code]

Exercise 2:

Make an image processor that swaps the value of colour channels in each pixel. For example, swapping the red channel with the green channel.

Exercise 3:

Try to refactor your program for exercises 1 and 2 in a way that traversal of image is separated from the point-wise transformation, by using `mapImage` .

[advanced exercise]

Exercise 4:

Find a small size image processing algorithm (e.g. by searching online), and implement it using `QFeldspar`.