Medical Image Analysis Exercises: Session 01

http://physics.medma.uni-heidelberg.de/cms/

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01: resave of an RGB image

input: `onion.png` from MATLAB

a: read the RGB file

b: save the following content in 4 different 8-bit PNG files

- R-channel of the image
- G-channel of the image
- B-channel of the image
- convert the image into a grayscale intensity image and save it

c: display the topleft 10x10 elements of the grayscale image in the console

02: resave of a DICOM image

input: `CT-MONO2-16-ankle.dcm` from MATLAB

a: read the DICOM file

b: display the following DICOM information one by one in the console

- modality
- rows
- columns
- bits allocated
- rescale intercept
- rescale slope

c: save the grayscale intensity image with a proper scale in one 8-bit PNG file