
MATLAB Assignment 1

Question 1

The portable graymap format (PGM) grayscale images used in this assignment were retrieved from <http://sun.aei.polsl.pl/~rstaros/mednat/index.html>. This is a dataset of medical grayscale images for evaluating image compression algorithms. The set was prepared as a part of the research project Nr 4 T11C 032 24, which was fully supported by the Grant of the Polish National Research Committee (KBN).

Read 4 Computed Tomography (CT) image file and store as array of structs

```
close all; clear; clc;

% *Load 1st image filename, width, and height into struct myIMG*
img1 = imfinfo('ct_3030.pgm');
f = img1.Filename;
w = img1.Width;
h = img1.Height;
myImg(1).imagename = f;
myImg(1).width = w;
myImg(1).height = h;

% *Load 2nd image filename, width, and height into struct myIMG*
img2 = imfinfo('ct_3071.pgm');
f = img2.Filename;
w = img2.Width;
h = img2.Height;
myImg(2).imagename = f;
myImg(2).width = w;
myImg(2).height = h;

% *Load 3rd image filename, width, and height into struct myIMG*
img3 = imfinfo('ct_4006.pgm');
f = img3.Filename;
w = img3.Width;
h = img3.Height;
myImg(3).imagename = f;
myImg(3).width = w;
myImg(3).height = h;

% *Load 4th image filename, width, and height into struct myIMG*
img4 = imfinfo('ct_4087.pgm');
f = img4.Filename;
w = img4.Width;
h = img4.Height;
myImg(4).imagename = f;
myImg(4).width = w;
myImg(4).height = h;
```

Save array of structs as .mat file

```
save imagesFileInfo.mat myImg;      % imagesFileInfo.mat
```

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