

# Math 865 HW1 Solution

April 21, 2008

HW1: (1) Try to read in images in Matlab and determine the type and resolution of the images

1. cameraman.tif : 256x256, 8-bit grayscale intensity image
2. circles.tif: 256x256, 1-bit binary image
3. trees.tif: 258x350, 8-bit, index color image
4. lily.tif: 186x230, 8-bit color RGB (24 bit) image
5. clown.bmp: 200x320, 8-bit index color image
6. rice.jpg: 64x64, 8-bit grayscale image

(2) Generate the image shown in the p.7 and then save them in two different type format

```
I=zeros(64,120);
I(:, 1:20)=0;
I(:, 21:40)=50;
I(:, 41:60)=100;
I(:, 61:80)=150;
I(:, 81:100)=200;
I(:,101:120)=250;
Inew=uint8(I);
imshow(Inew);
imwrite(Inew,'pic1.png','BitDepth', 8);
imwrite(Inew,'pic2.jpg');
```