

EECS 448 - Lab 01

In Matlab, write a script to

1. assign values to two matrices
2. multiply the matrices (both element-wise and matrix multiplication)
3. compute and then display the fibonacci sequence (around 5 to 10 entries)
4. change all occurrences of the minimum value of a matrix to zero without using loops
5. solve the system of equations $y=Ax$ using matrix inversion
6. import a rgb image and convert it to grayscale
7. with a bin width of 10, compute the frequency histogram for the grayscale image and display the corresponding histogram

```
fig = bar(...)  
saveas(fig, 'filename', 'png')
```

useful matlab commands:

- *diary*: <http://www.mathworks.com/help/matlab/ref/diary.html>
- *imread*: <http://www.mathworks.com/help/matlab/ref/imread.html>
- *imshow*: <http://www.mathworks.com/help/matlab/ref/imshow.html>
- *rgb2gray*: <http://www.mathworks.com/help/matlab/ref/rgb2gray.html>
- *bar*: <http://www.mathworks.com/help/matlab/ref/bar.html>, see the example titled “Specify Bar Locations”

Deliverables:

- your script (m file)
- your “diary”
- your bar graph
- (optional) your source image