

## Homework #2.

If you get completely stuck on some of these, feel free to get ideas/advice from a friend, or ask me, but ultimately the work you submit should be your own. Even if you can't get the right answer, you should still submit code with some of what you've tried (better than leaving it blank). Keep in mind that however difficult it seems, you're still learning from trying, so that's good. Also, if you're stuck for a while, try taking a break and then coming back to it later.

### Homework:

1. Generate a list of random integers selected from 1 to 1000. Loop through these values, and if the value is even, write that to the screen ('the value is even), and if it's odd, display that to the screen ('the value is odd'). If the random value happens to be 999, end the loop and display the words, "Ending script early". Otherwise, at the end of the script, write "End of script".
2. Write a script that continues to generate a new random integer that's greater than 1000 until it finds a square number. [For example,  $\sqrt{9} = \pm 3$ , so 9 is a square number.]
3. Write a script that runs for 60 seconds; During that time, print to screen the current time remaining. (HINT: use *tic* and *toc*)
4. Generate a random 100x10 matrix. Return the 10 values of the the row with the greatest mean value.
5. Generate a random matrix 100 X 100 X 5 matrix. Write a script that loops through each of the 5 100x100 matrices, displays the random image, pauses for 2 seconds, and then displays the next one. After the last one, display some text like "end of experiment", and close the figure.