Practice Exercise Questions (Beginner)

Notes 1: Consider it as fun part of your learning and don't take it as a burden or assignment with a forced deadline. Do exercise by yourself.

Notes 2: Do not consult the solutions directly, make sure you first attempt the questions by yourself and If you are unable to get it correctly than consult the solution.

Note 3: If feel difficulties in understanding the solutions, post your question in the Q/A section of the course. Do not forget to mention the question number you are querying about.

Note 4: If you feel you have some exciting questions, please inbox to me and I will add to the questions list there after review. This will help you fellows to have more practice and fun.

Note 5: **Have Fun**

Q:-1. Write a single statement for finding the indexes of positive values using the `find()` function. For instance, if Suppose `Q = [4 5 6 0 0 1 2 3 -1 -2]` then the statement should return

1 2 3 6 7 8

Q:2. Write a statement that will reverse the order of the values in a vector. For instance, if

`X = [4 5 6 1 2 3]` then the statement should display 3 2 1 6 5 4

Q:3. Write a statement that displays the values at the odd indexes of an array (consider array to be a matrix with one dimension).

Q:4. Consider a 10 * 10 matrix `A = rand(10)`. Extract the lower right 5*5 matrix using a single matrix command. Please note that the resultant matrix should have a size of 5*5.

Q:5. Consider a one dimensional matrix `A = [8 9 7 4 5 2 6 5 4 1 3 9 8 7 5 2 3]`. Write a single statement which will return all unique elements from the matrix A which are greater than or equal to 2 and less than or equal to 5.

Q:6. Consider a one dimensional matrix A such as `A = [5 8 8 8 9 9 6 6 5 5 4 1 2 3 5 3 3 ]`. Show the percentage frequencies of unique elements in the matrix A in descending order.

Hint: use the functions tabulate and sort

Q:7. Write a statement that will delete the elements with value of 0 from a single dimensional matrix A.

Q:8. Generate an array of 10 random numbers between 1 and 100. Then find out how many of the elements are between 1 and 25, how many between 25 and 75 and how many between 75 and 100.

Q:9. Consider a variable X that contains some string. We want to display the contents of the string in alphabetical order (i.e., hello becomes ehllo). Assume numbers and punctuation symbols will not be included in the string. Write a MALTAB statement that will do this job for us.

Q:10. Write a MATLAB statement that will compute index of the row with the most nonzero elements in a 2D matrix. Assume there will always be exactly one row that matches this criterion.

Enjoy MATLAB