Mastery Assignment #2 Basics
Fall 2022
Matthew Woodring

This file contains the basics of the second mastery assignment. It is intended to provide a basic overview of the assignment and help with any tricky parts.

General Overview:

- Submit your code on Zybooks in the "31. Mastery Assignment #2" section
- All code is automatically graded by Zybooks
- You can submit your code as many times as needed before the deadline
- The assignment is due Sunday, September 18th, 2022 by 11:59pm
- No late work is accepted
- There are no known errors in the grading script as of September 15th, 2022

Task 1:

- Recall the data type the 'menu' function accepts as an input
- Recall what the 'menu' function returns
- Remember that the 'fprintf' requires different placeholders for different data types (i.e. %s is a placeholder for strings)

Task 2:

- Adding the number '5' to the last element of the 'Days' variable is not hardcoding
- Recall the difference between a comma and semicolon when appending elements to a vector/matrix
- Read the prompt carefully to understand what you need to add; there are 4 distinct things you need to append in Task 2 (one on 'Days', one on 'LocationID', and two on 'Ice')
- Make sure you understand what should be in the bottom right corner of 'Ice' (the intersection of Day 65 and ID NE051 in the sample output). Hint: this value is *not* a calculated value
- Recall the 'save' function; it is needed here

Mastery Assignment #2 Basics
Fall 2022
Matthew Woodring

Task 3:

- How can you go about finding the total number of elements in a vector/matrix?
- Recall that the ‘max’ function requires ‘[]’ as the second input argument if you want to take the max of the rows instead of columns (i.e. the max of the rows of a variable x would be: max(x, [], 2))
- Recall what the ‘max’ function returns when it is applied to a matrix
- Recall what the ‘find’ function returns (hint: it does *not* return the actual matching element)
- Recall how to get the ‘find’ function to return a row/column pair instead of a linear index

Task 4:

- Remember that Task 4 has two parts: the main script and a function file
- If you do it carefully, you can complete the function in one line of code
- The ‘csvwrite’ or ‘writematrix’ function is the best one to use for saving the new ice matrix
- Remember that your function is submitted to a different section in Zybooks than your main script

Task 5:

- Useful functions for this task include: ‘plot’, ‘title’, ‘xlabel’, ‘ylabel’, ‘grid on’, and ‘sprintf’
- Use the ‘sprintf’ function for the title of the plot

Mastery Assignment #2 covers some of the fundamental topics in MATLAB that you have to understand well to pass the course. Please make sure you can complete all of MA2 by yourself without the aid of notes or other people. Also, before the first exam, make sure you can complete MA2 in the recommended proficiency time of 1.25 - 2.00 hours.