

Homework 2

ENGR 130, AU 23

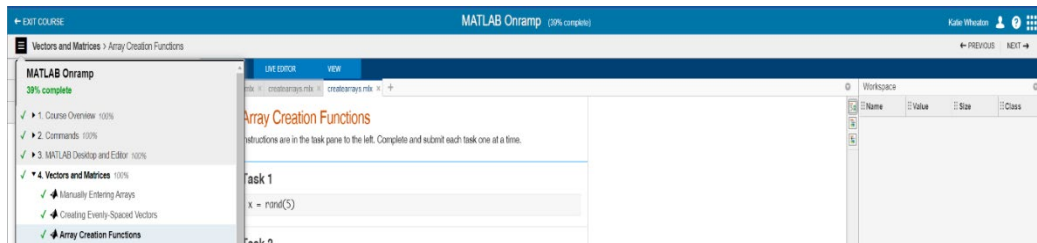
Submit your solutions for all problems as a single pdf file. Follow all instructions in the Assignment Submission Guide posted in the Canvas Resources area. Failure to comply with these instructions will result in a reduced (or possibly zero) grade.

Question 1 (3 points)

You will work through approximately one-third of a self-paced tutorial called MATLAB Onramp. You will need a MathWorks account to complete this work. Allow about 1 hour for completion. You may pause along the way and your work will be saved.

Complete this problem as follows:

- Access the MATLAB Onramp course here: <https://matlabacademy.mathworks.com/>
- Watch the Course Description video
- Work through the first four modules:
 - Course Overview
 - Commands
 - MATLAB Desktop and Editor
 - Vectors and Matrices
- Upload to Canvas a screenshot verifying your 100% completion of the four modules (ie. 39% of the total course). Make sure your name is included in the screenshot. For example,



Note: Rarely, it may happen that MATLAB OnRamp will not load the next step in the tutorial. If this happens you can try refreshing the page, reopening the browser, or just waiting. Help avoid this problem by assuring you have a stable internet connection and consider using the Chrome browser. Ensure your browser is not blocking pop-ups, JavaScript, or cookies.

Question 2 (5 points)

You have been contacted by the manager of a local restaurant who would like your assistance in training the employees. You are to write an algorithm for the employees to follow when clearing and preparing a table for new customers. The algorithm should begin when the employee sees that the table has been vacated and end when the table is fully set and ready for a new group of customers to be seated. The tables in the restaurant have either 4 or 6 places, each to be set as shown in the image below. Each table has a ketchup bottle and salt and pepper shakers, in addition to the place settings. All items for clearing and setting the table are on a single cart. You

may assume that the server has already collected any credit card slips, pens, and tips from the table.

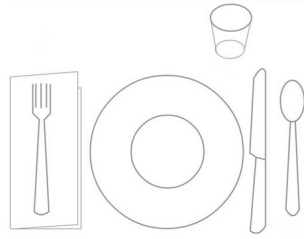


Figure 1. Standard place setting

First state the given information, including assumptions that have been provided in the problem statement. Next list any additional assumptions you have made about the situation. Write your algorithm as a numbered step-by-step list. An algorithm with a sufficient level of detail should have around 20 to 25 steps.

Question 3 (5 points)

Watch the TedTalk linked below (“Forget the Pecking Order at Work” by Margaret Heffernan) and for each question below write a response of a few sentences. The length of the video is about 15.5 minutes.

https://www.ted.com/talks/margaret_heffernan_forget_the_pecking_order_at_work?language=en

- 1) What is one point that the speaker made that was particularly impactful for you? Why did it make an impression on you?
- 2) What actions will you take, based on the content of this video, to help optimize your interactions with your team members this semester?