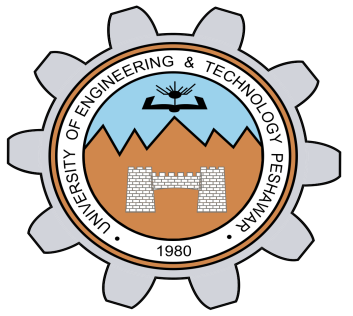
Lab Report No 1:

MATLAB Training

FALL 2022

**Digital Signal Processing**



Submitted By: **Maaz Habib**

Registration No: **20PWCSE1952**

Section**: C**

“On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work”

Submitted To:

**Engr. Ihsan Ul Haq**

Department of Computer Systems Engineering

University of Engineering and Technology Peshawar

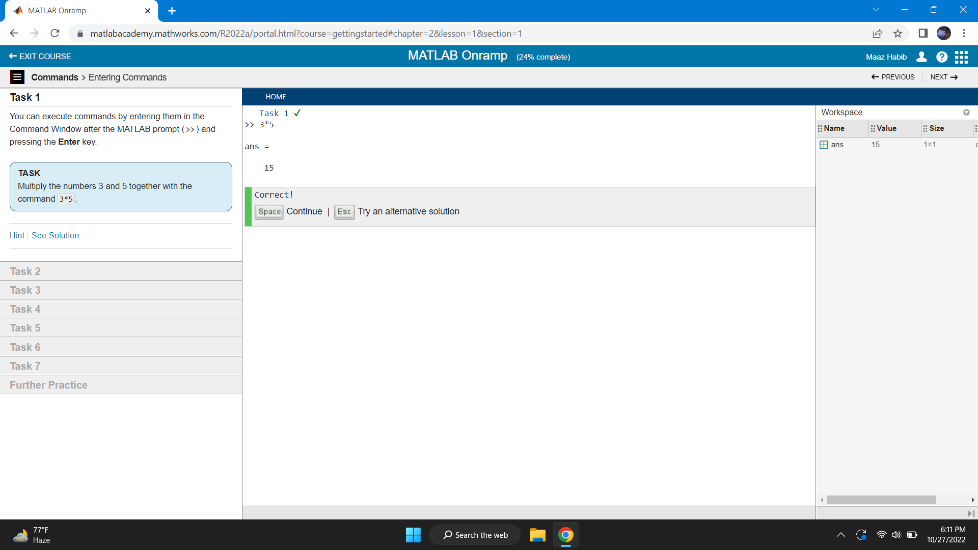
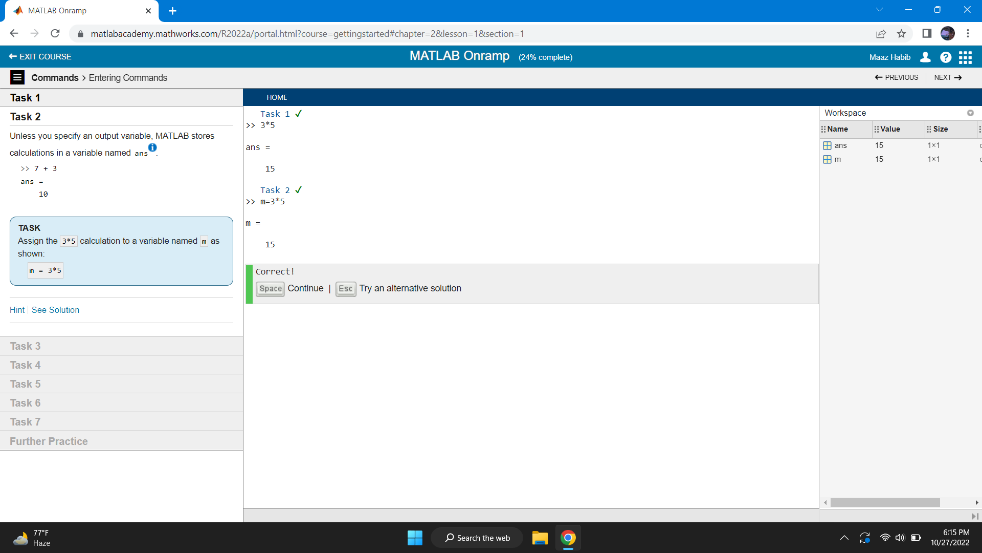
* **Course Overview**

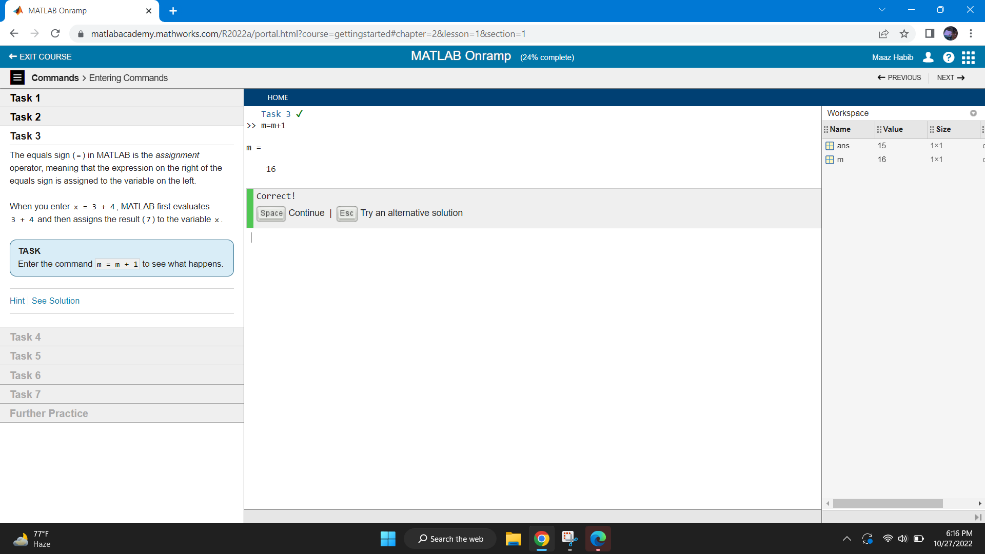
Objective: Familiarize yourself with the course.

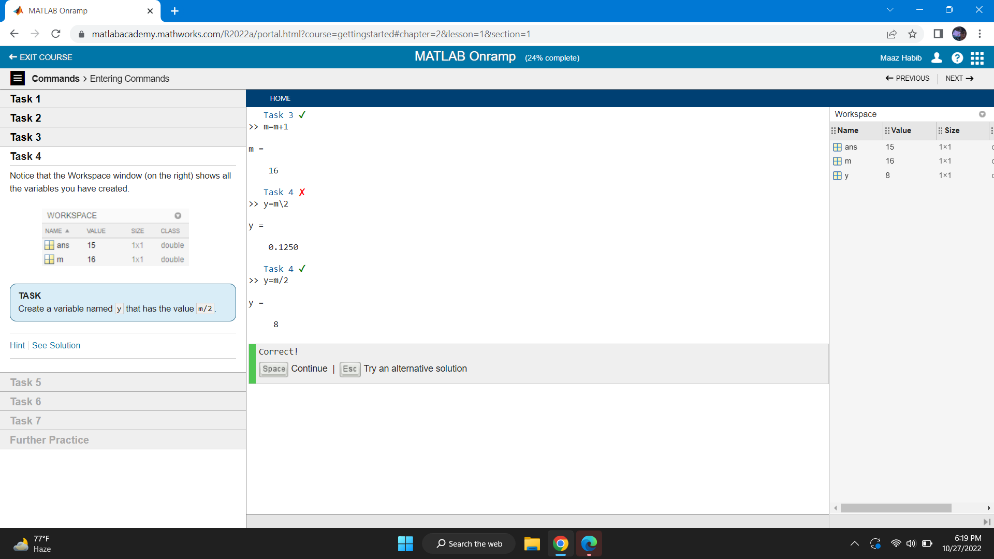
* **Commands**

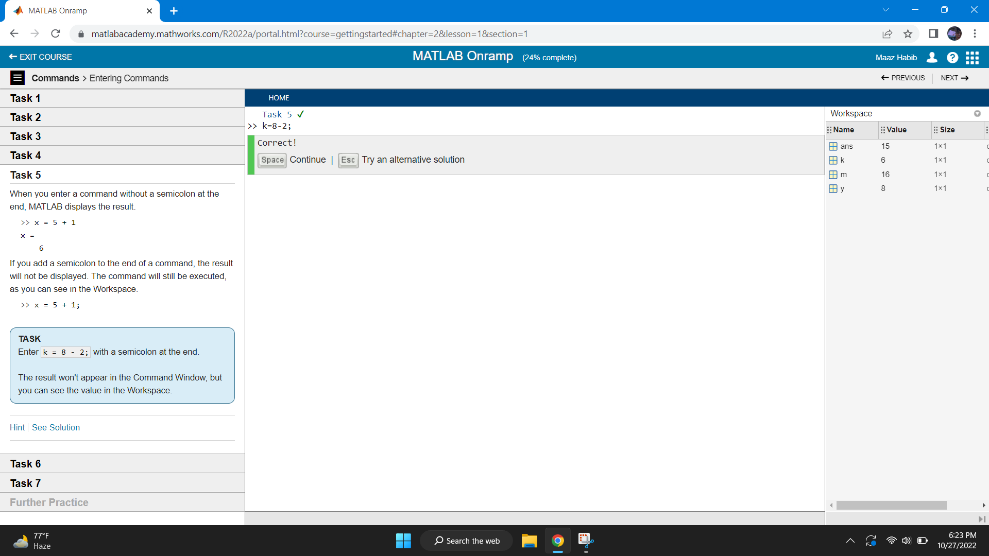
Objective: Enter commands in MATLAB to perform calculations and create

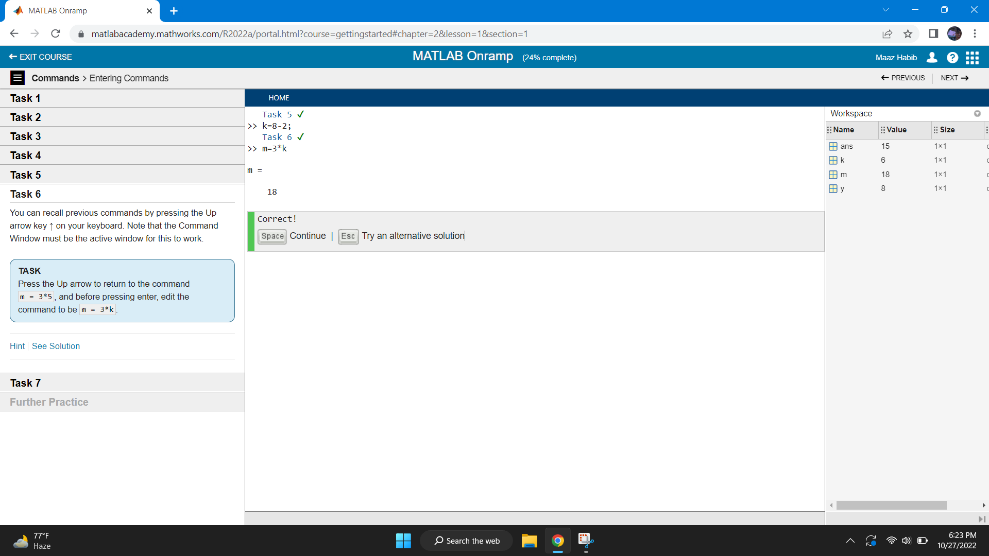
Variables.

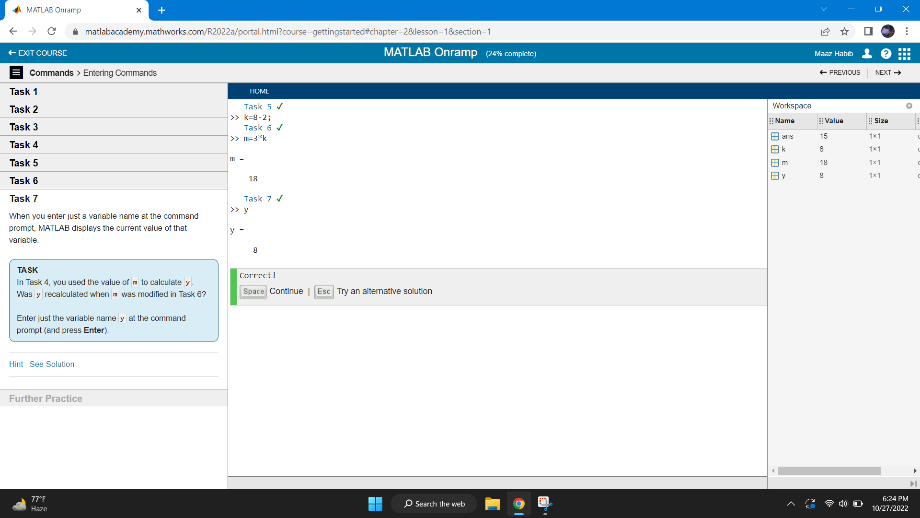
 

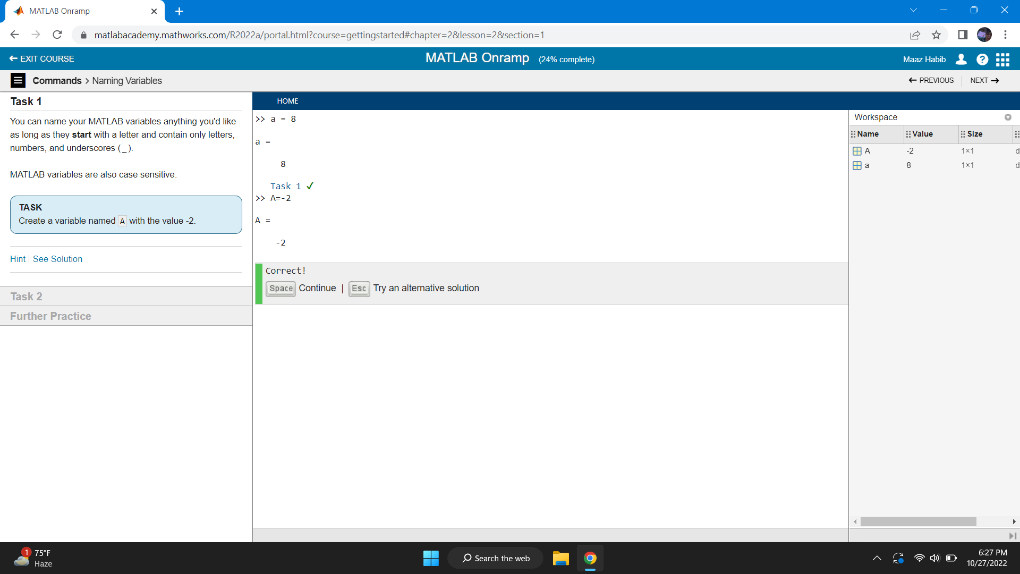


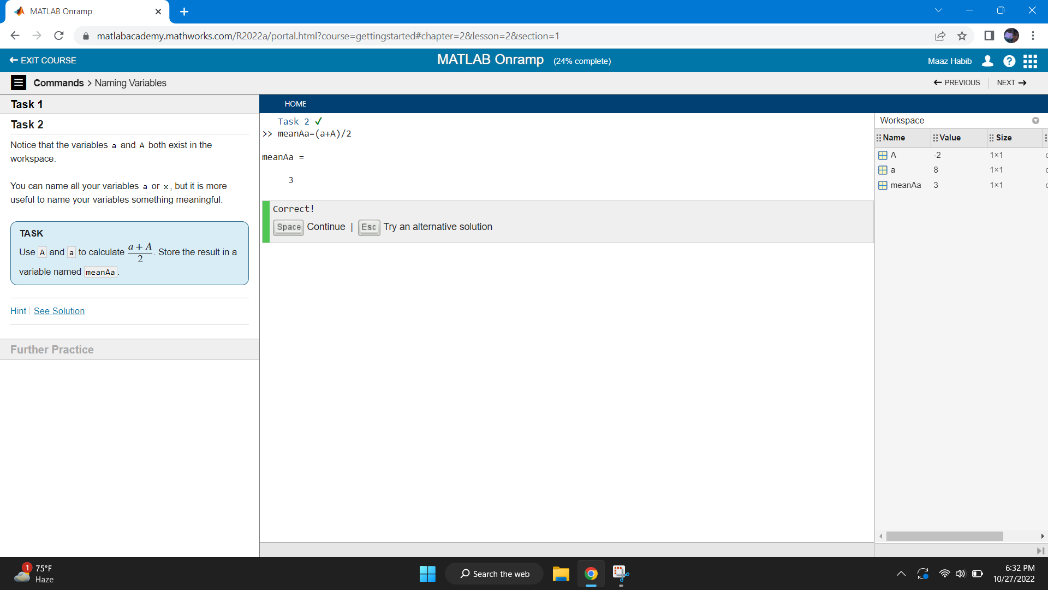


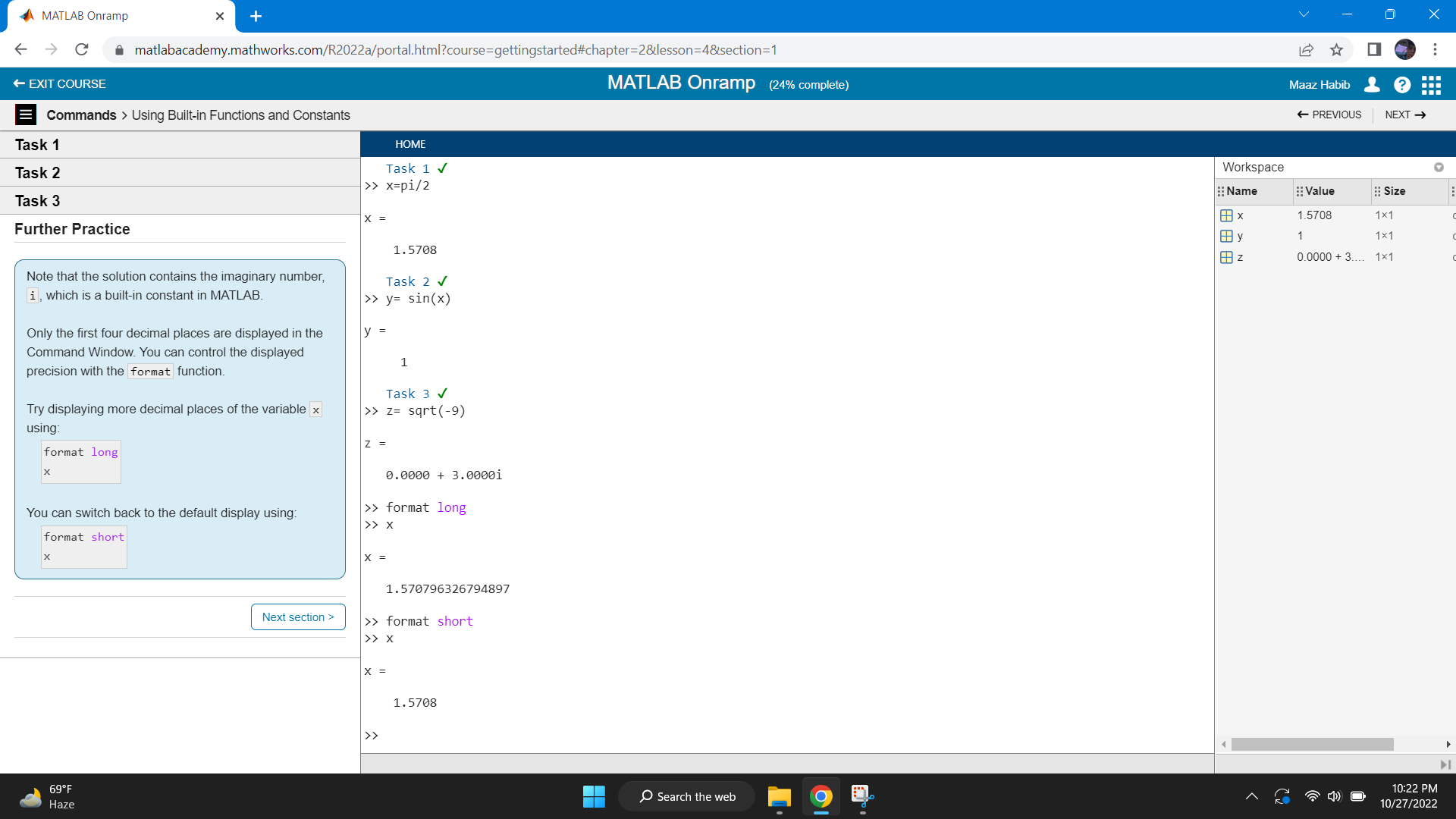


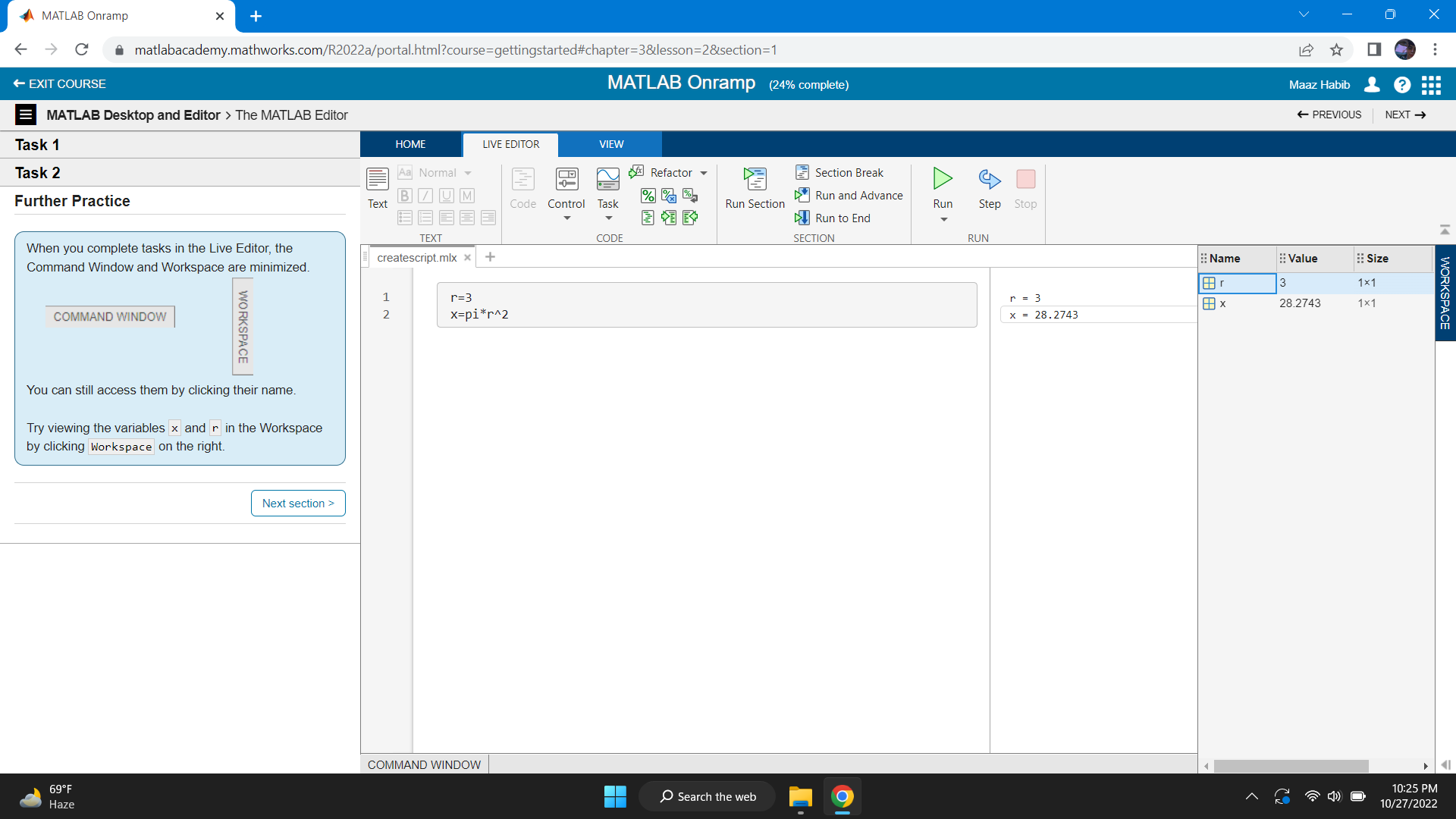






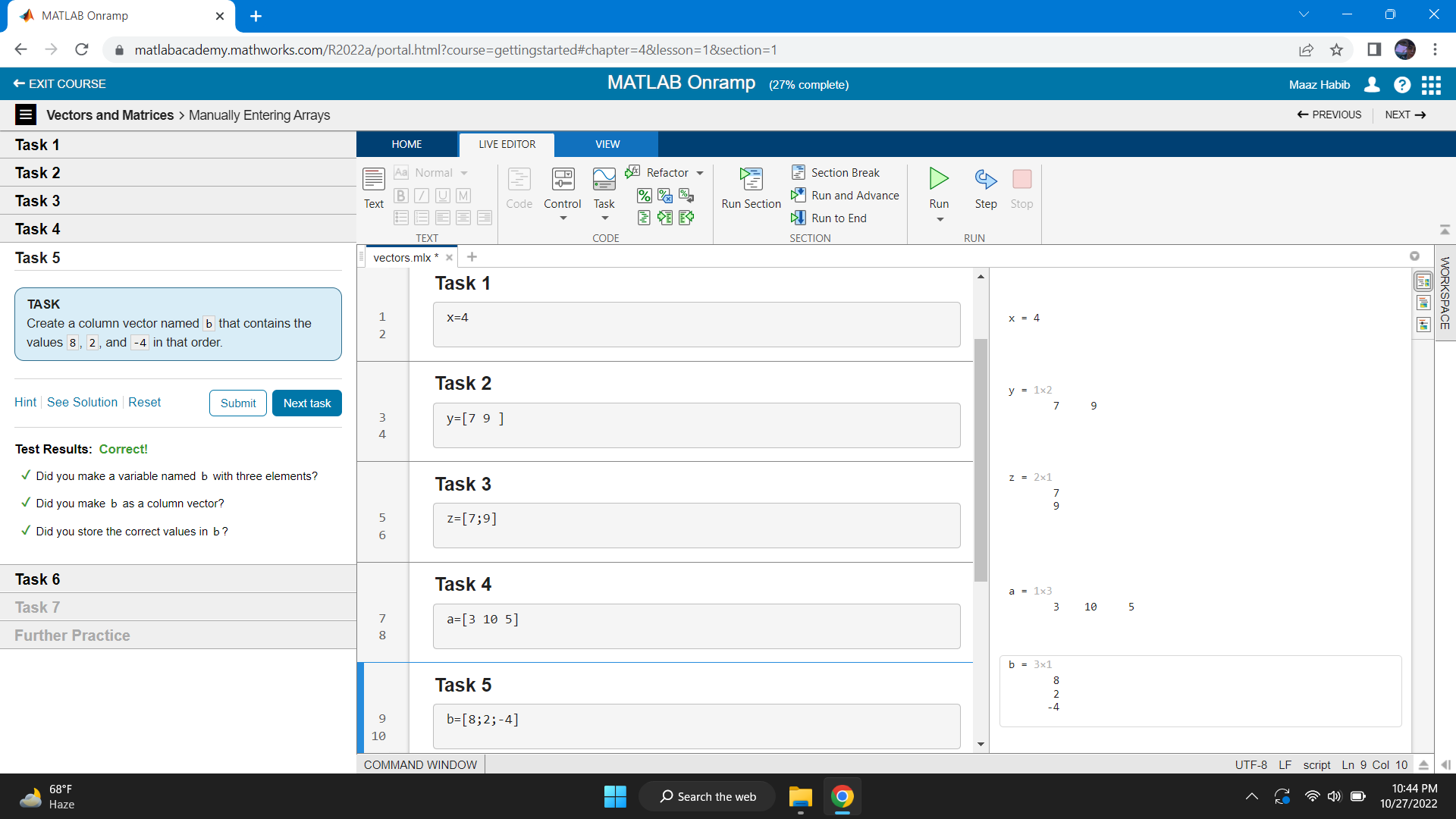


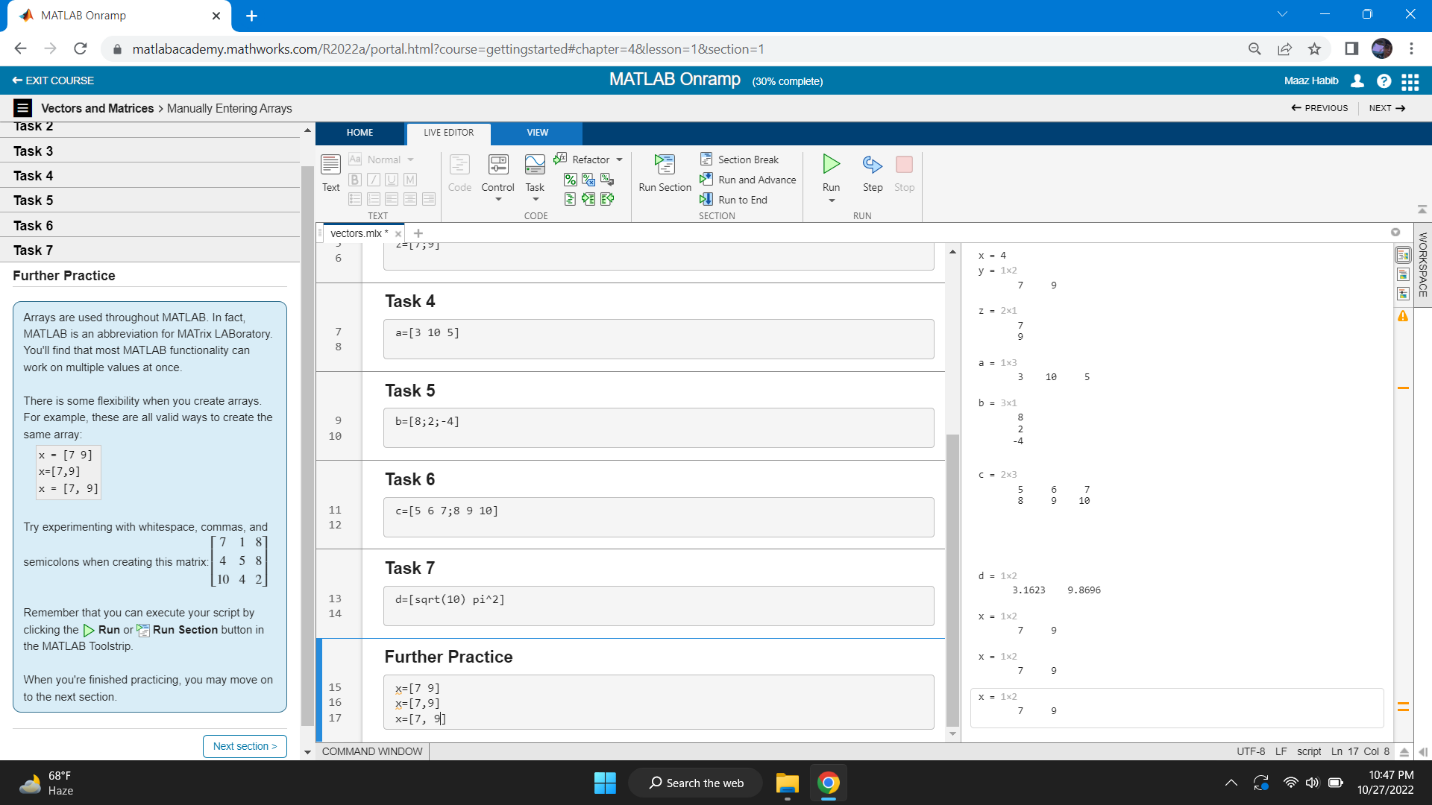




**3. Vectors and Matrices**

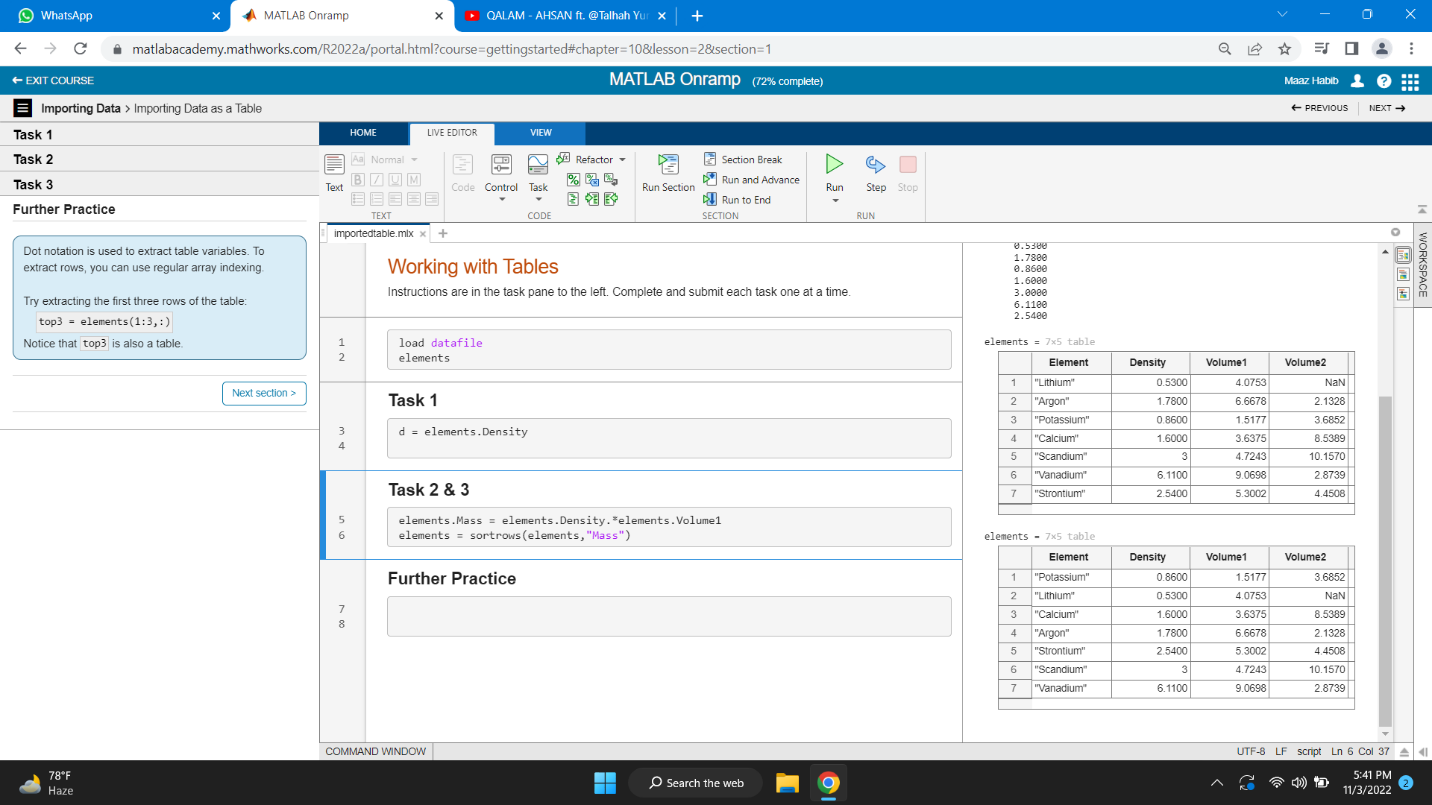
Objective: Create MATLAB variables that contain multiple elements.

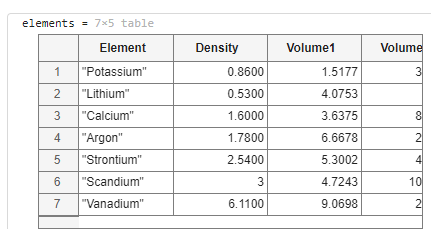




* **Importing Data**

Objective: Bring data from external files into MATLAB.





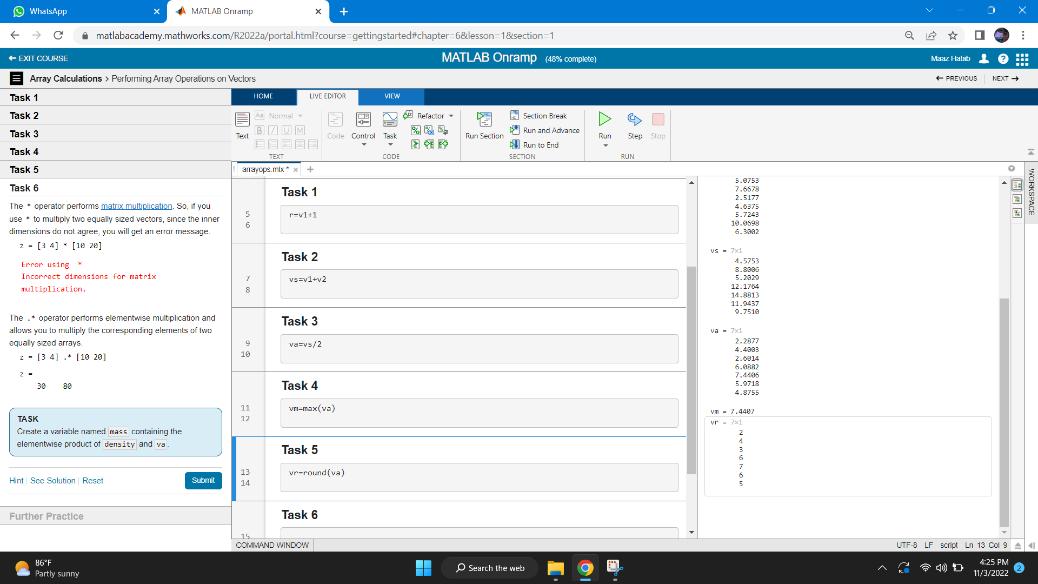
* **Indexing into and Modifying Arrays**

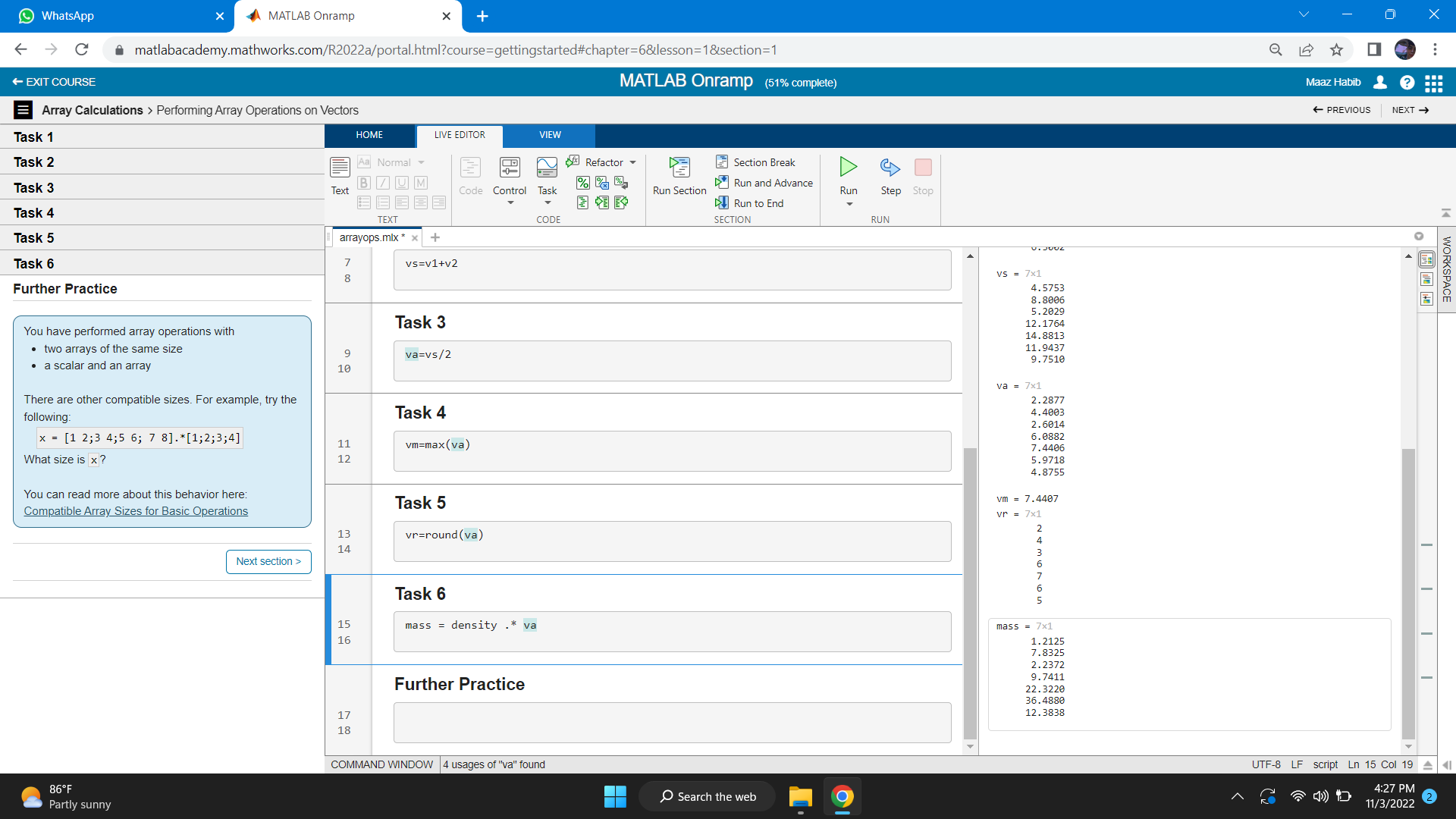
Use indexing to extract and modify rows, columns, and elements of MATLAB

Array.

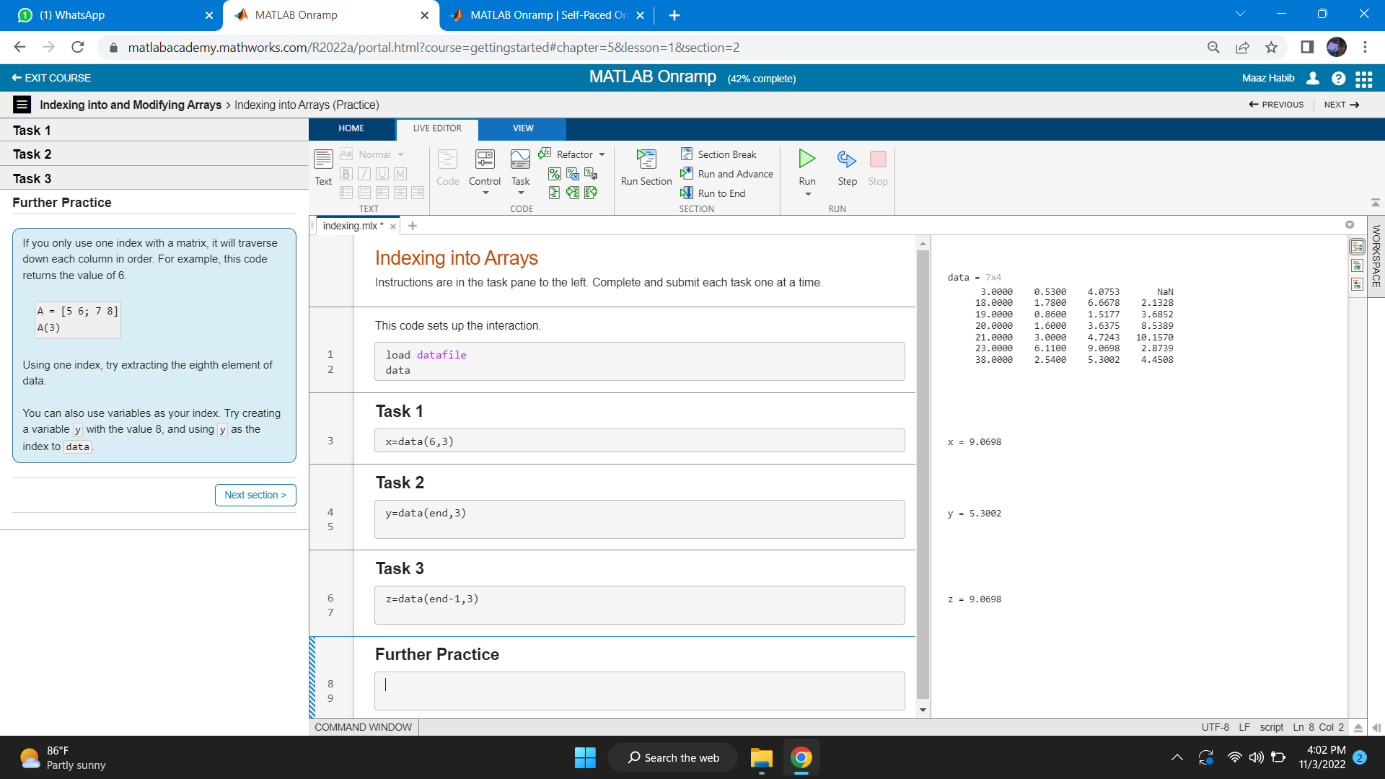
* **Array Calculations**

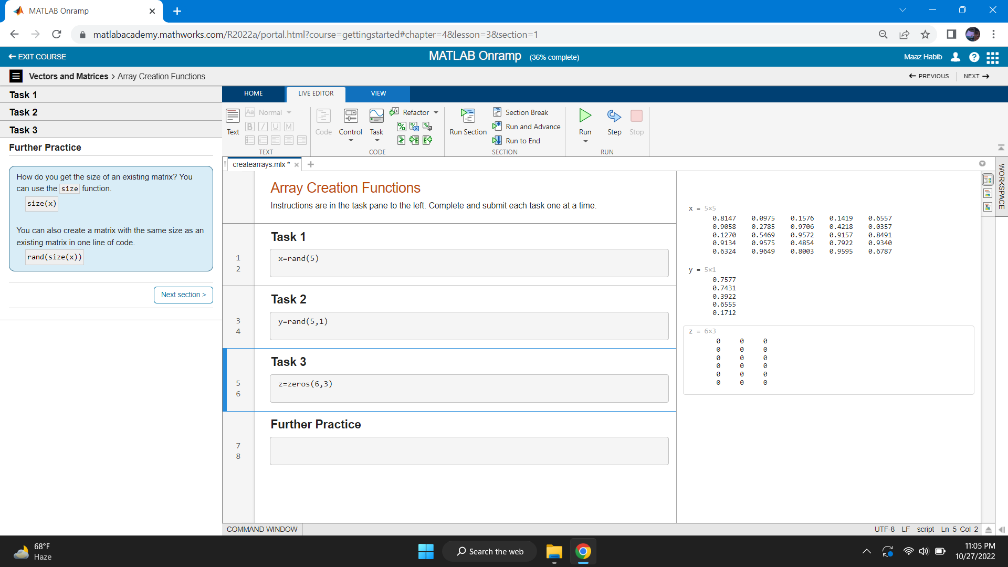
Objective: Perform calculations on entire arrays at once.

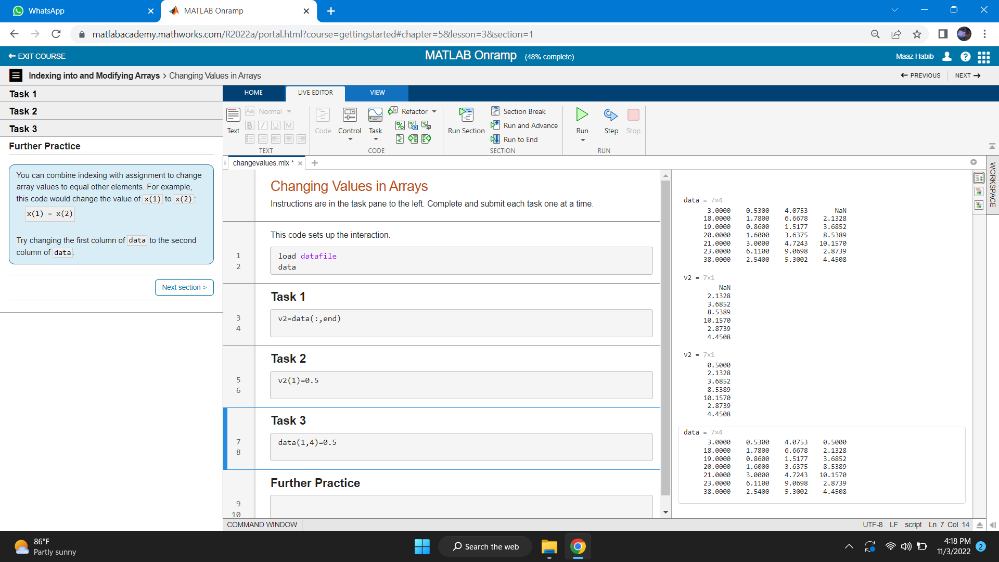


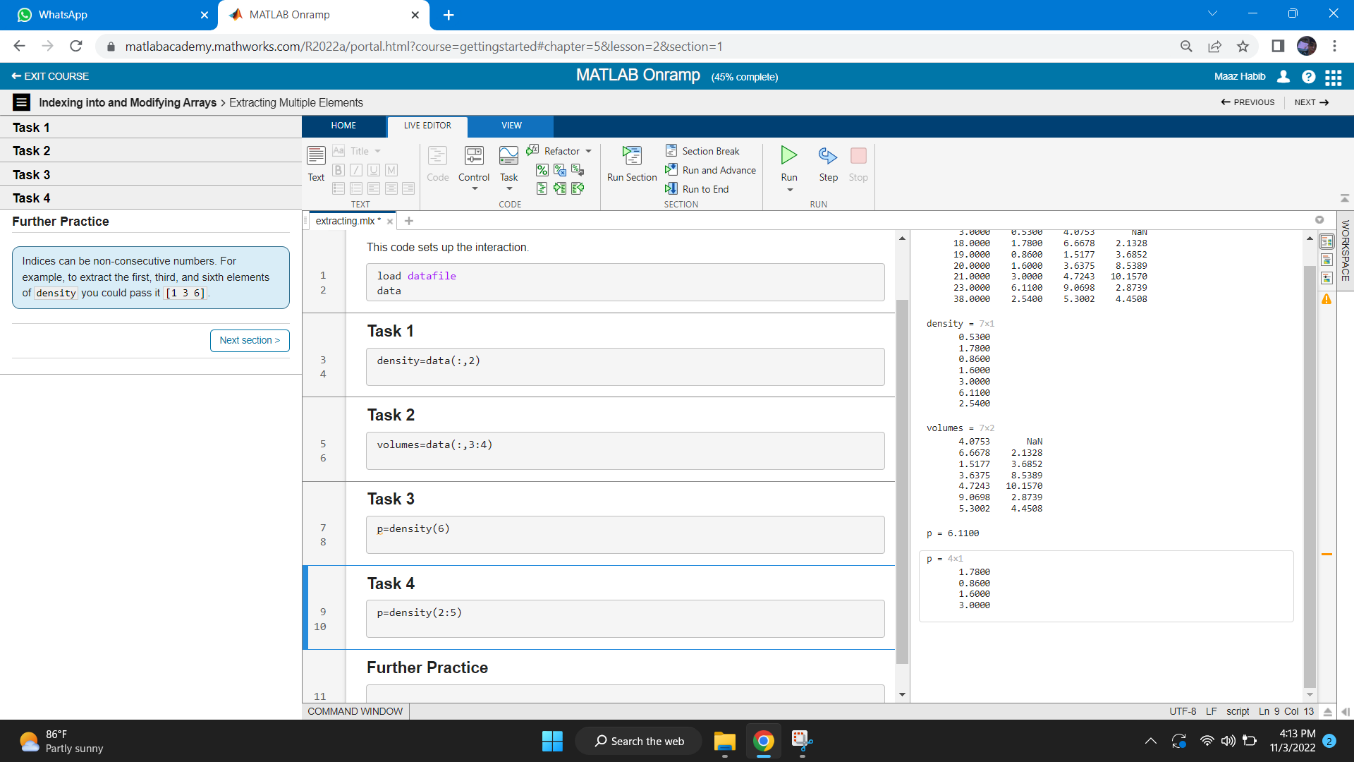


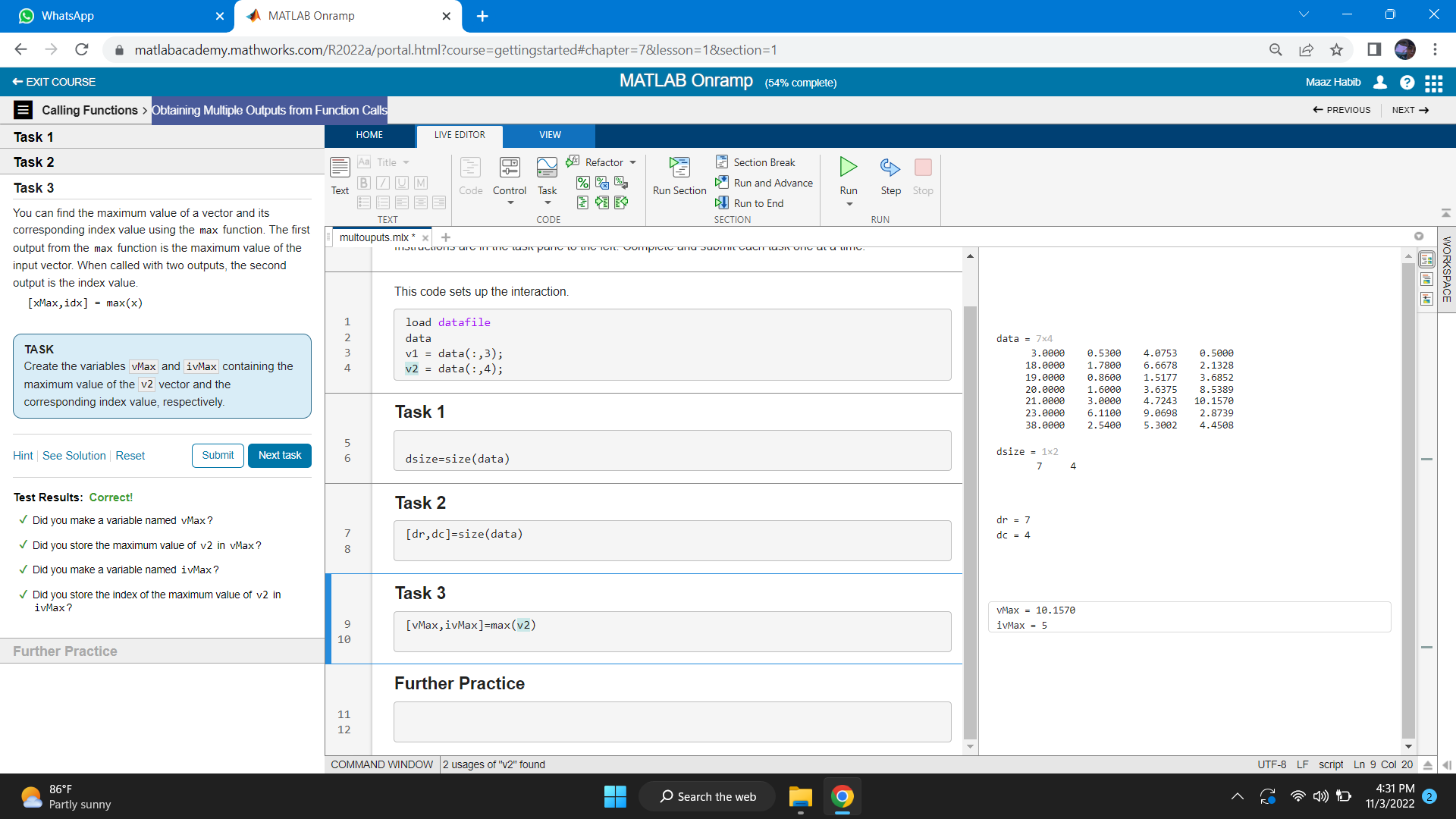
* **Indexing array**

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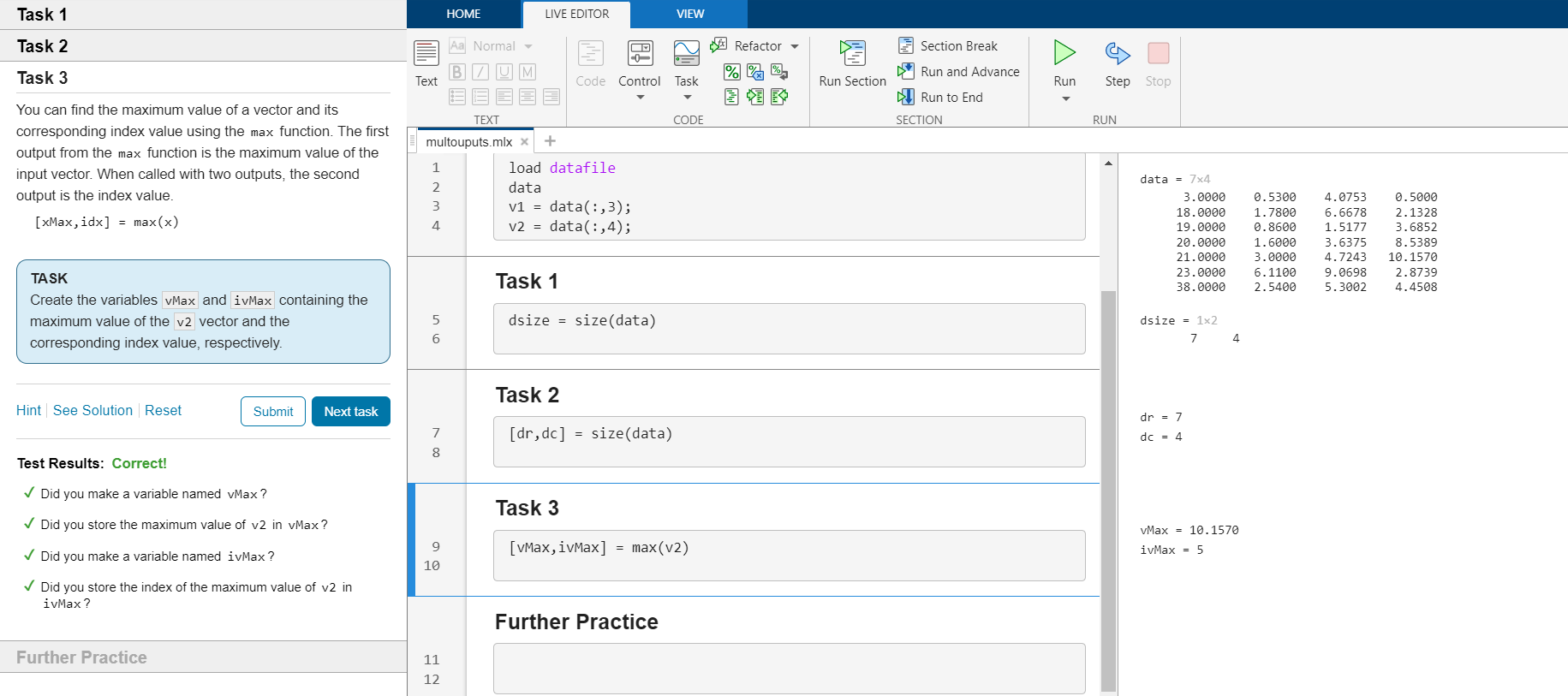






* **Calling Functions**

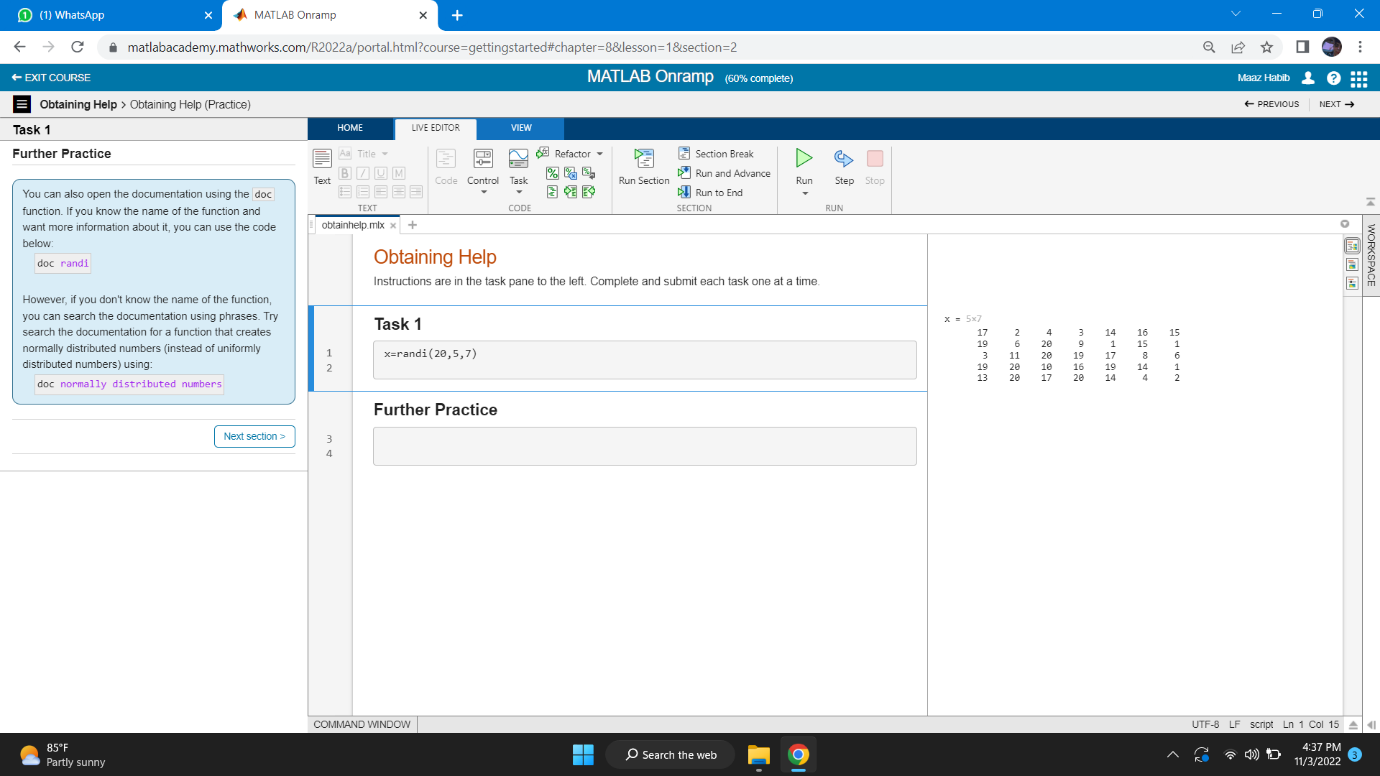
Objective: Call functions to obtain multiple outputs



**Obtaining Help**

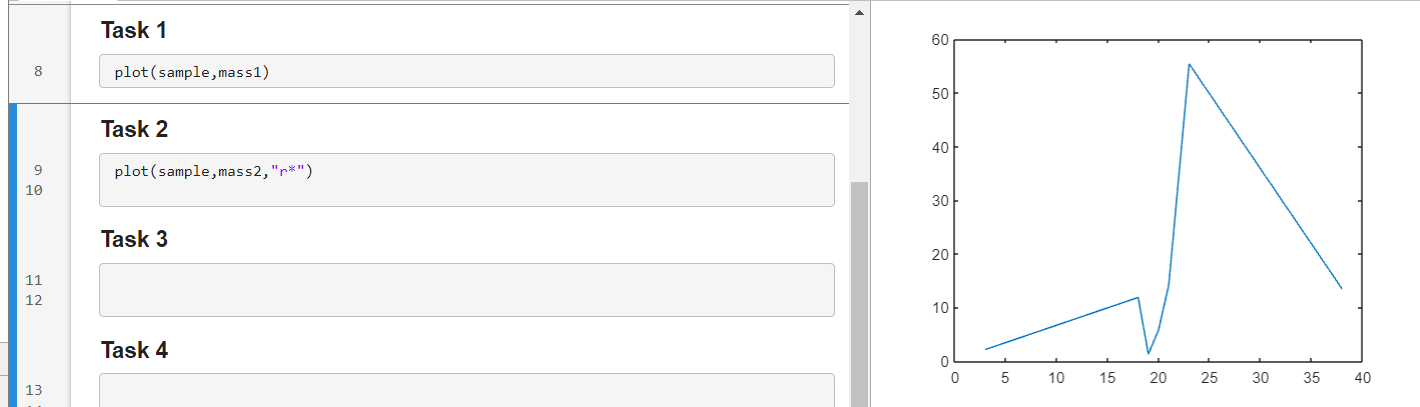
Objective: Use the MATLAB documentation to discover information about

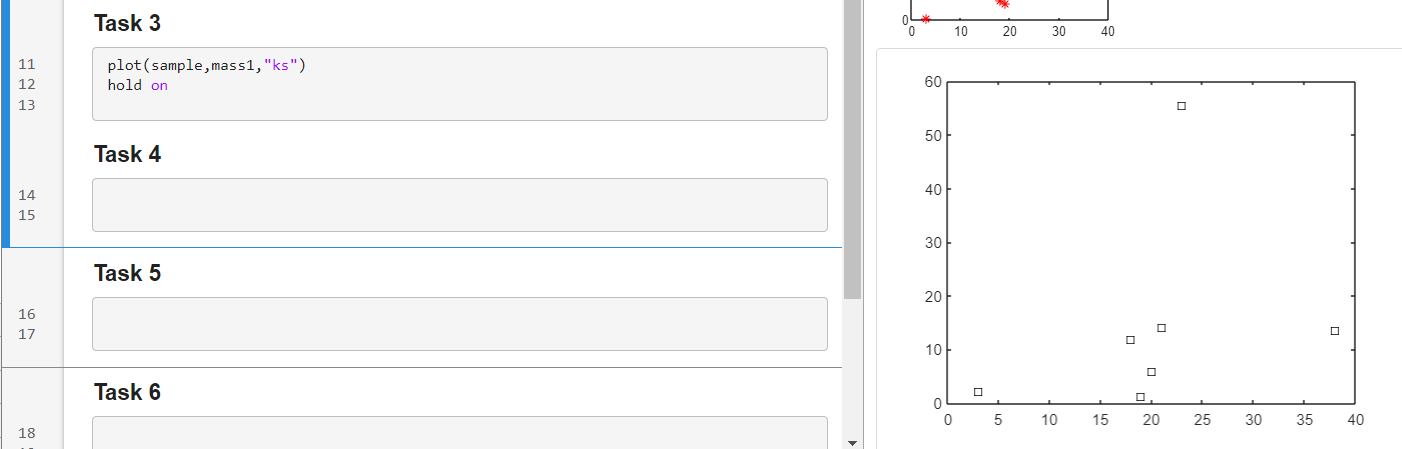
MATLAB features.



**Plotting Data**

Visualize variables using MATLAB&#39;s plotting functions.







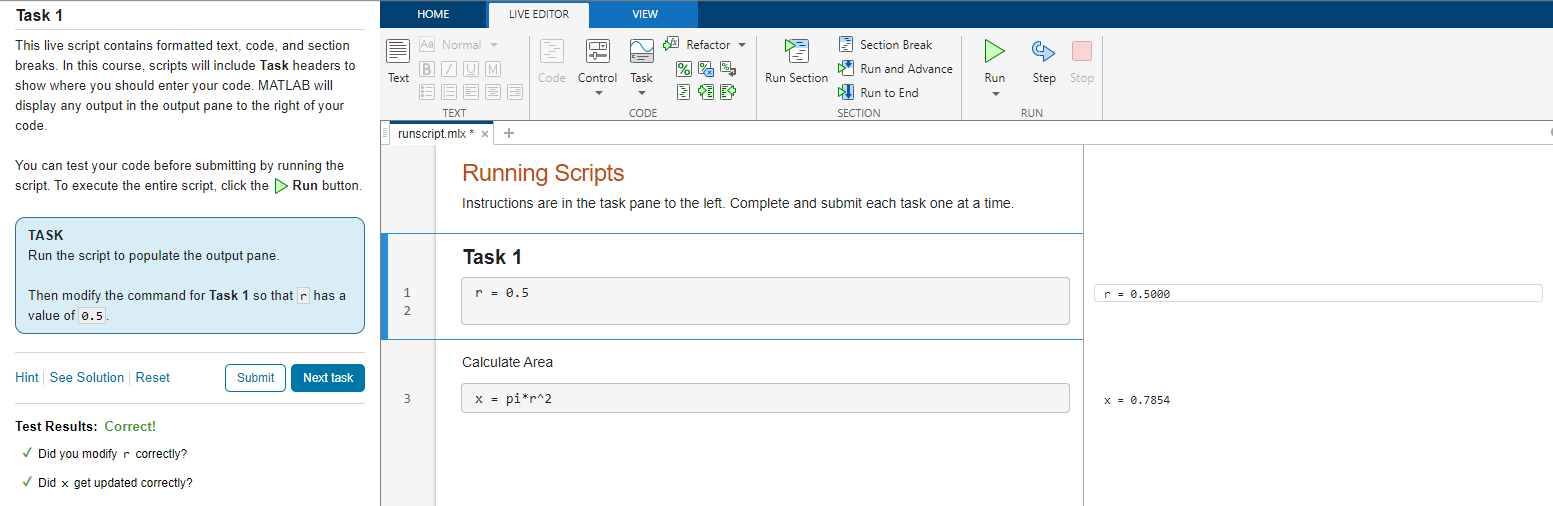


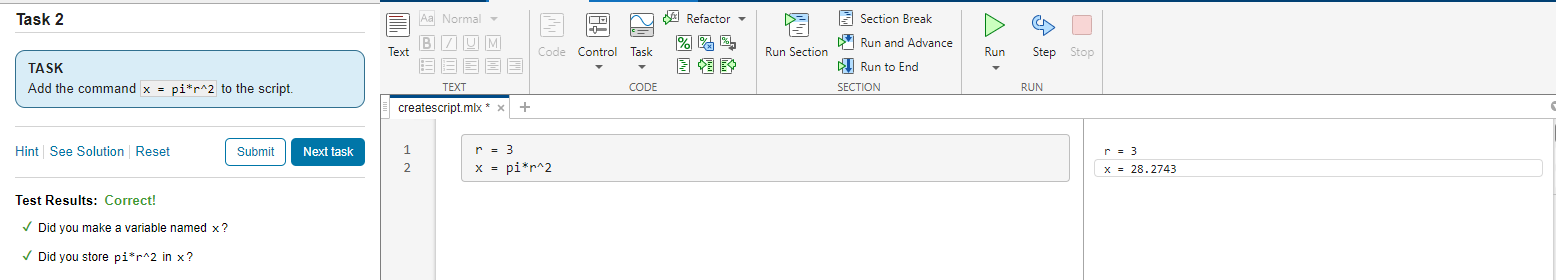
* **Review Problems**

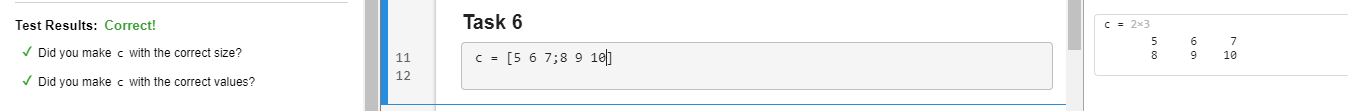
Objective: Bring together concepts that you have learned with a project.

* **MATLAB Scripts**

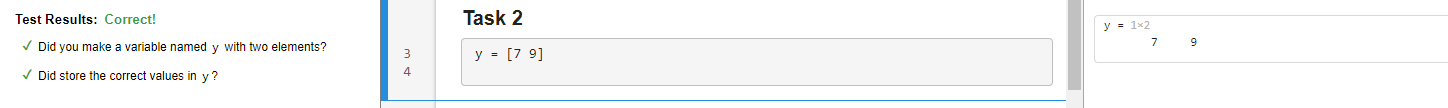
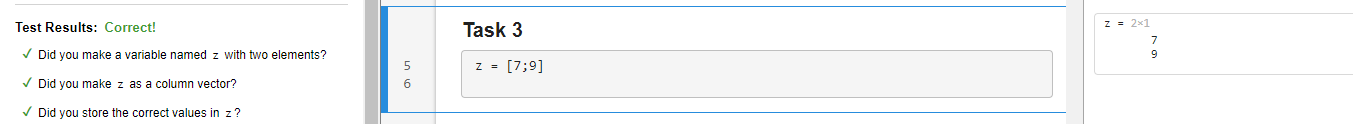
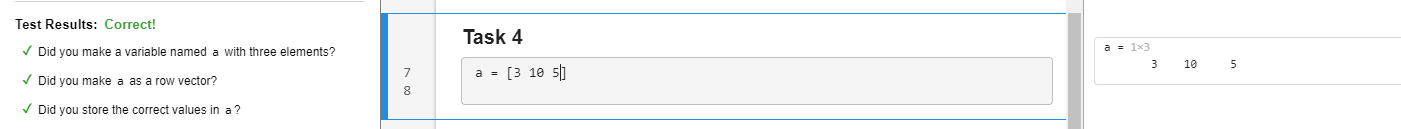
Objective: Write and save your own MATLAB programs







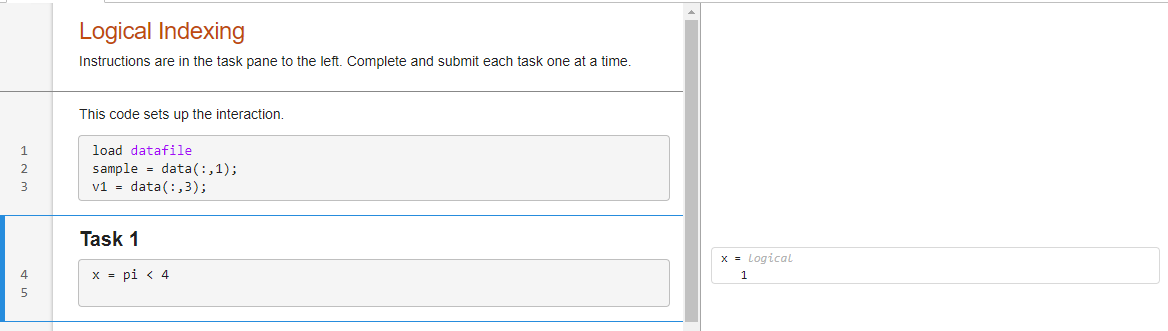


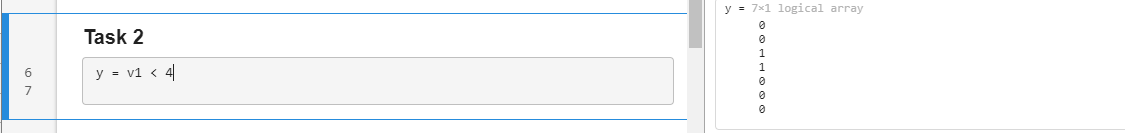


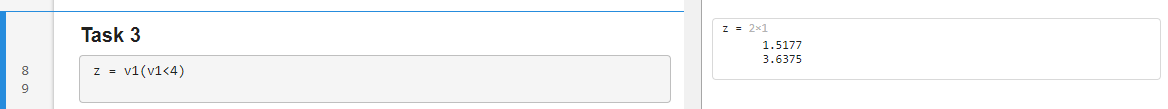
* **Logical Arrays**

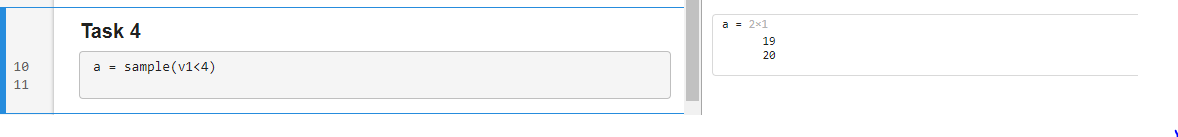
Objective: Use logical expressions to help you to extract elements of interest

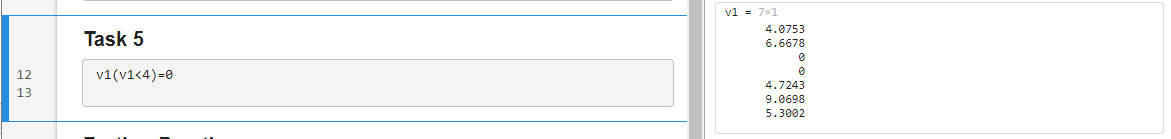
from MATLAB arrays.

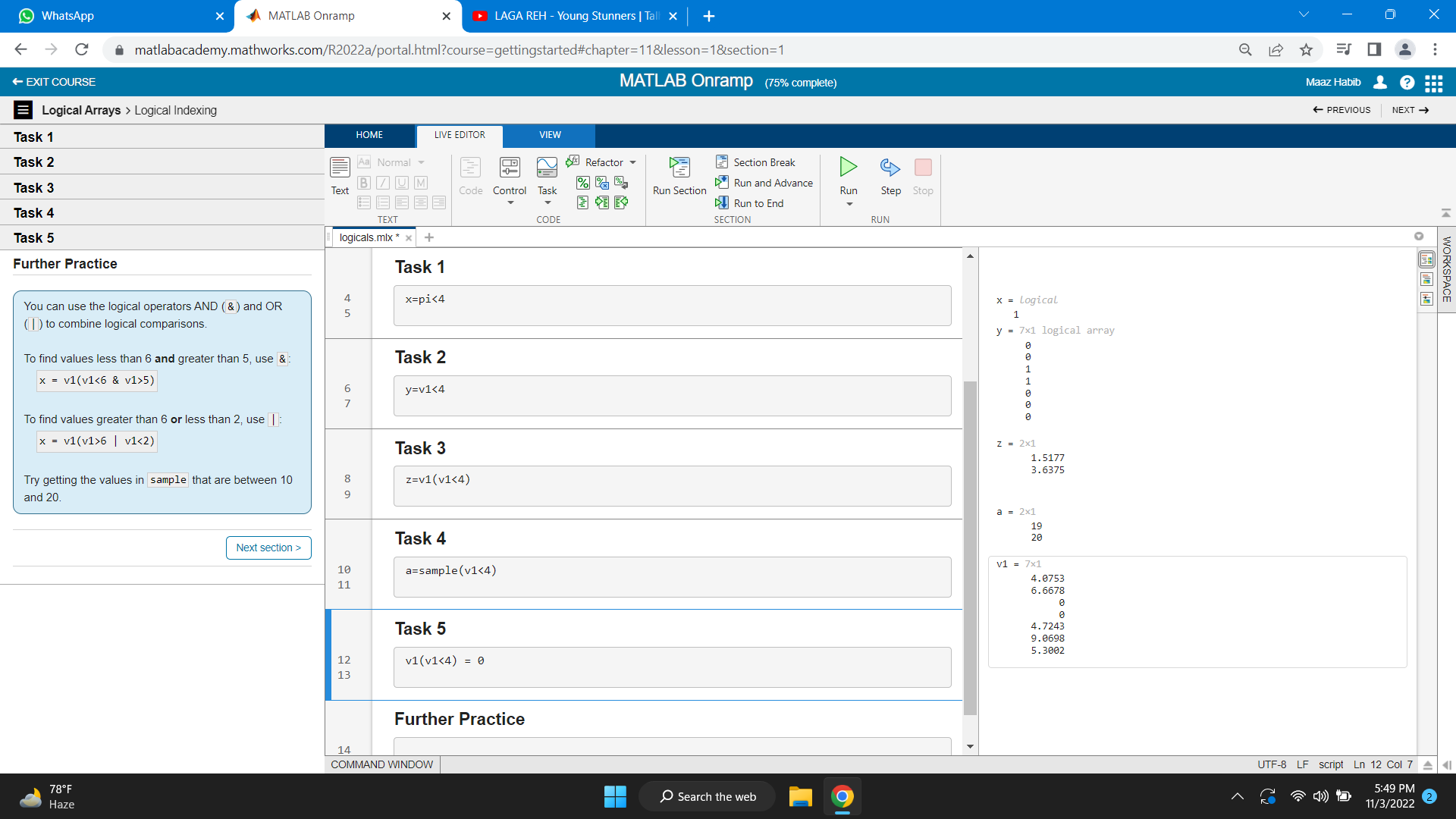










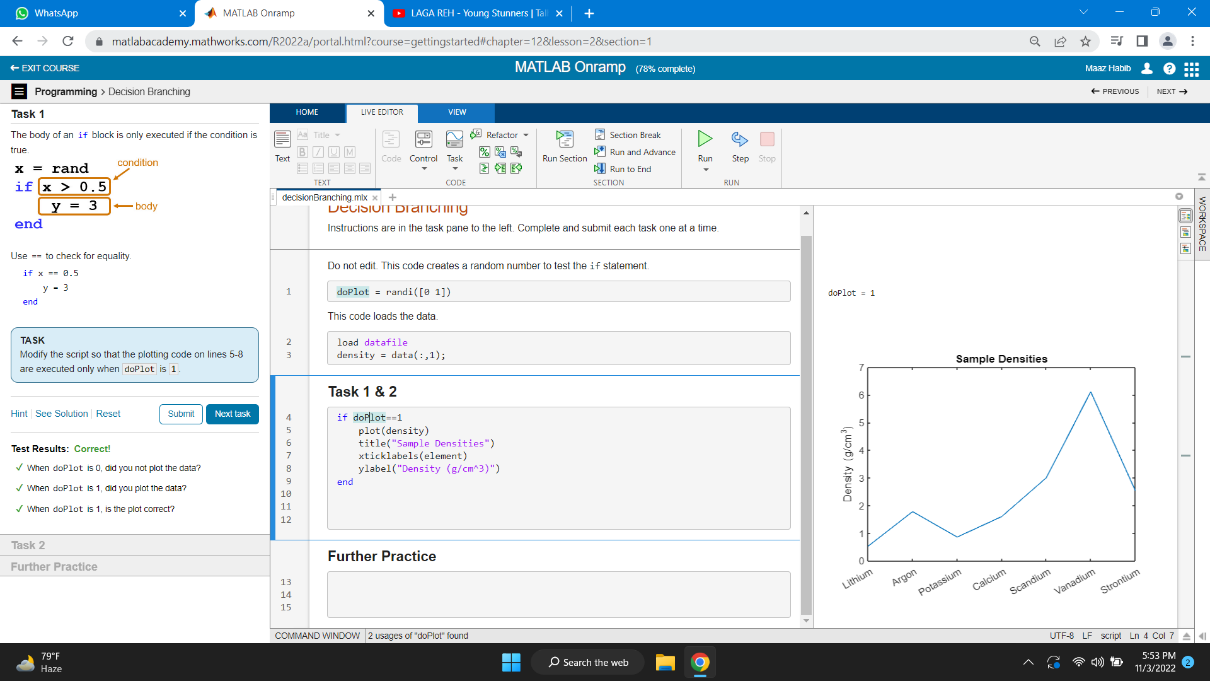


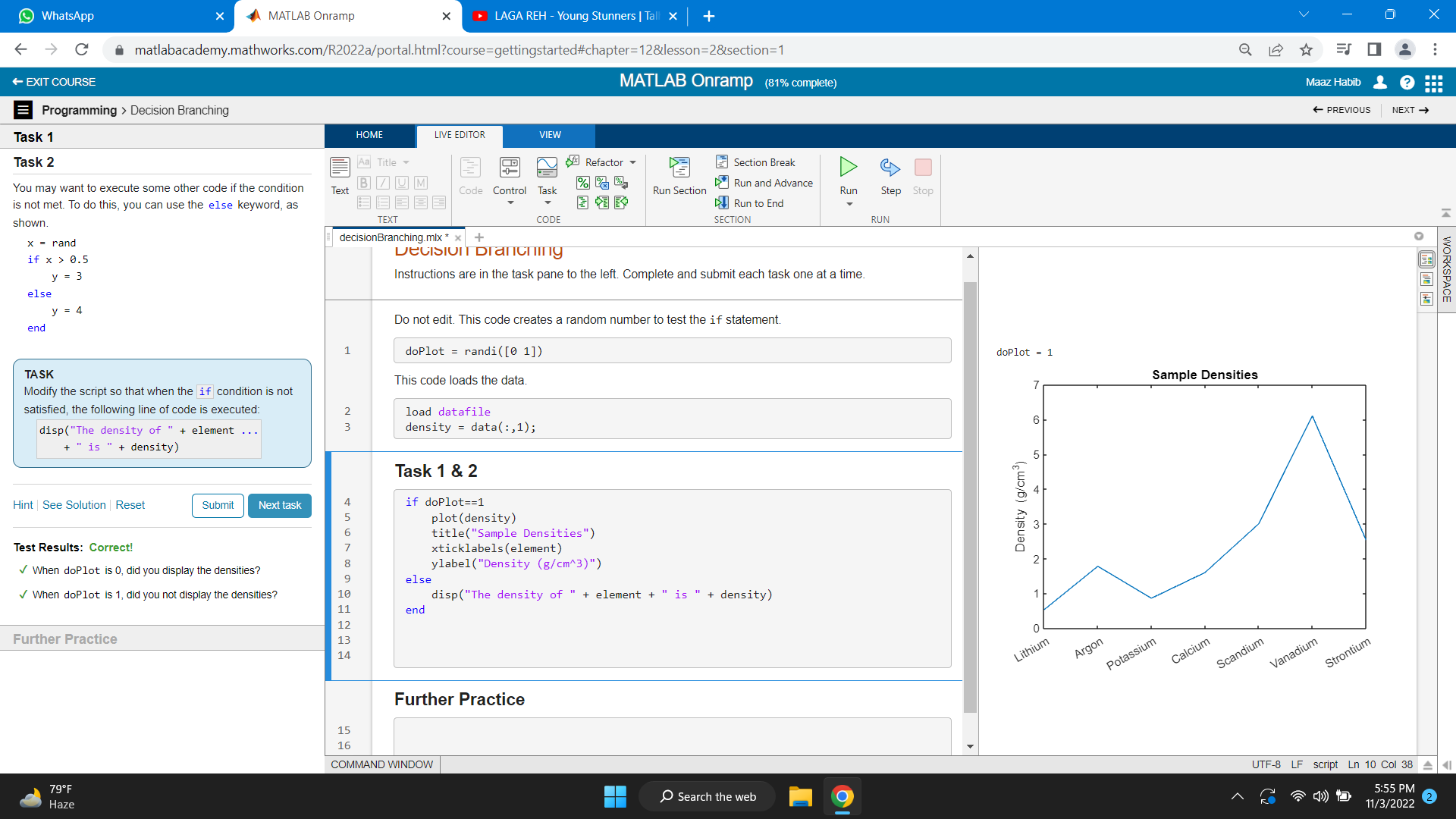
* **Programming**

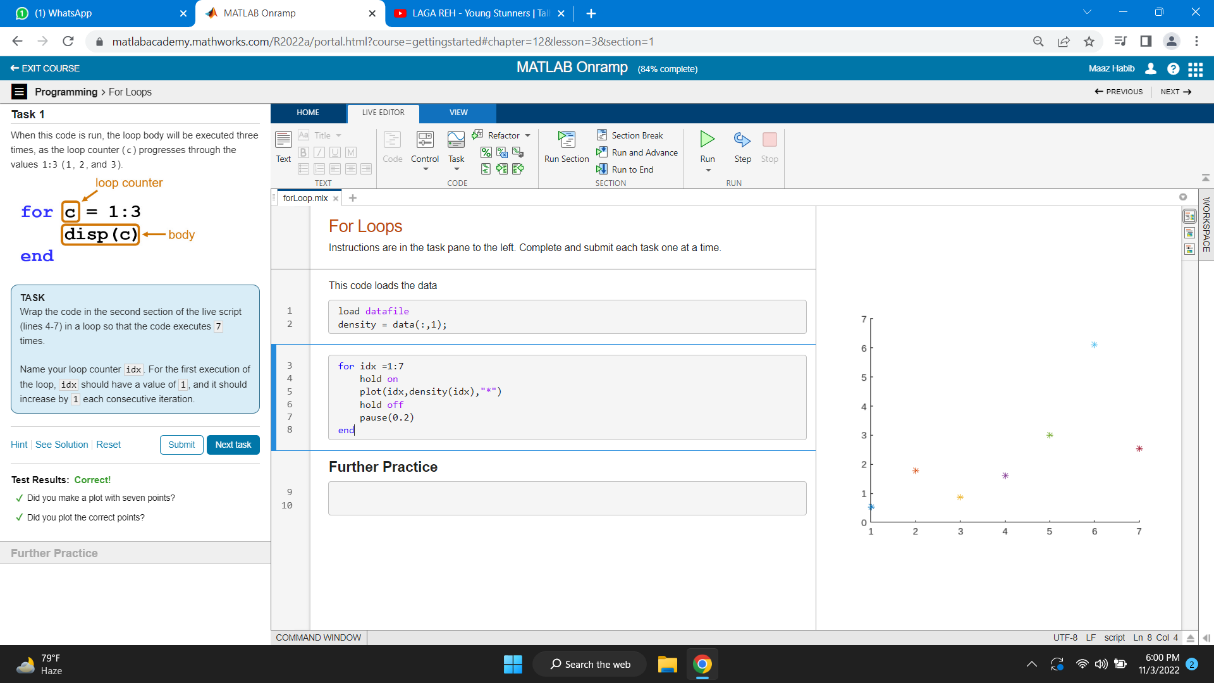
Objective: Write programs that execute code based upon some condition.

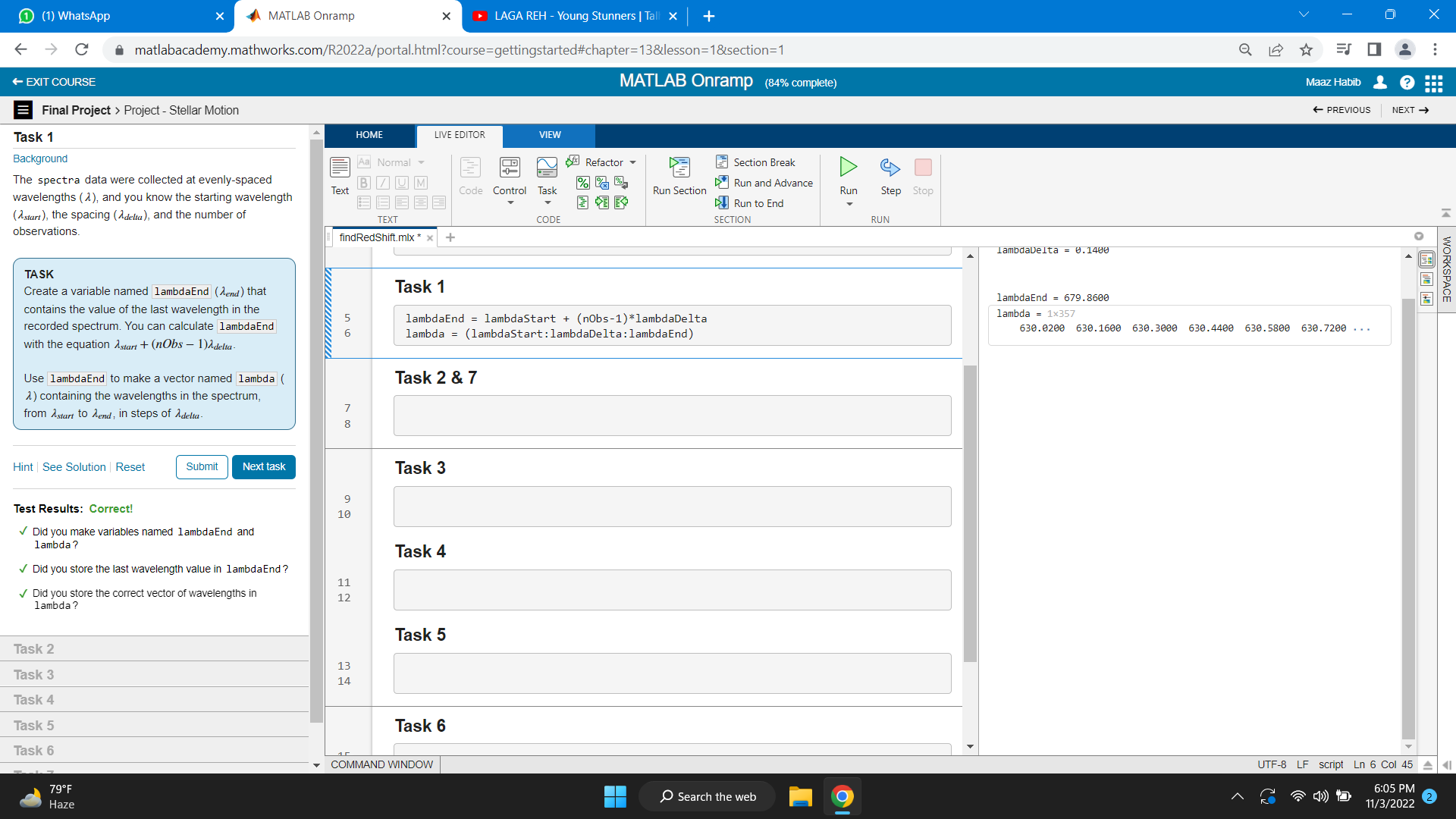
**Final Project**

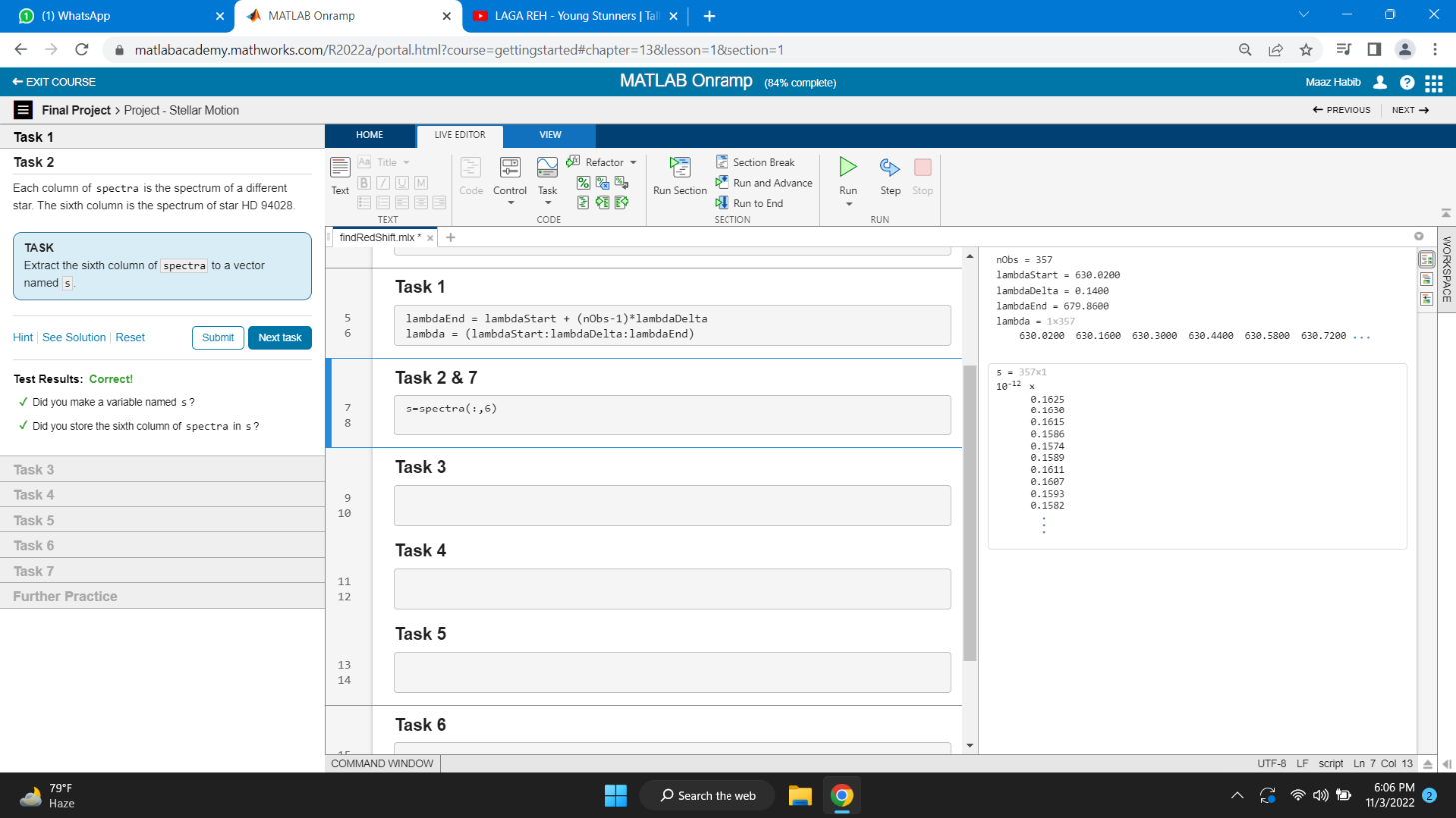
Objective: Bring together concepts that you have learned with a project.

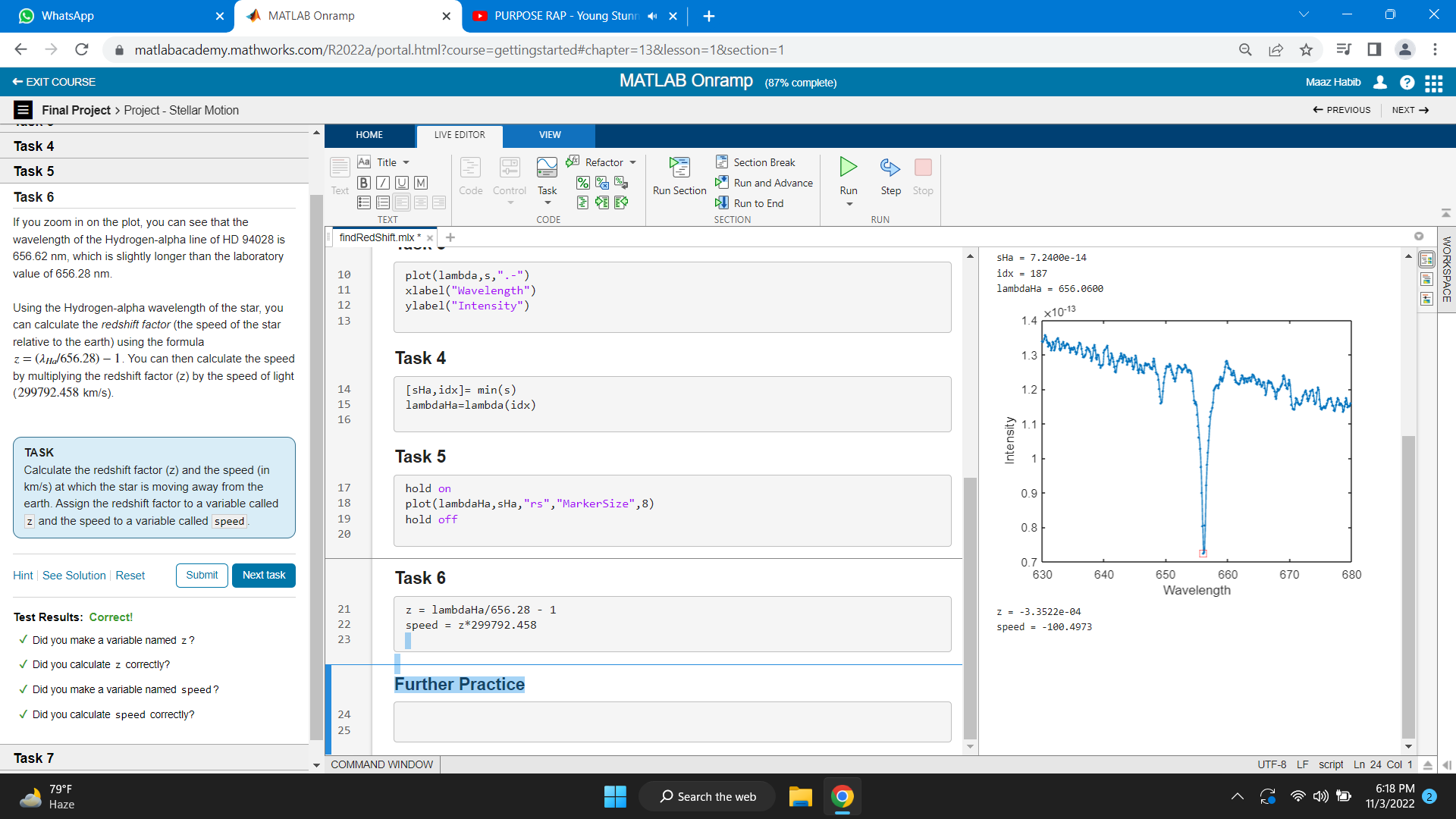


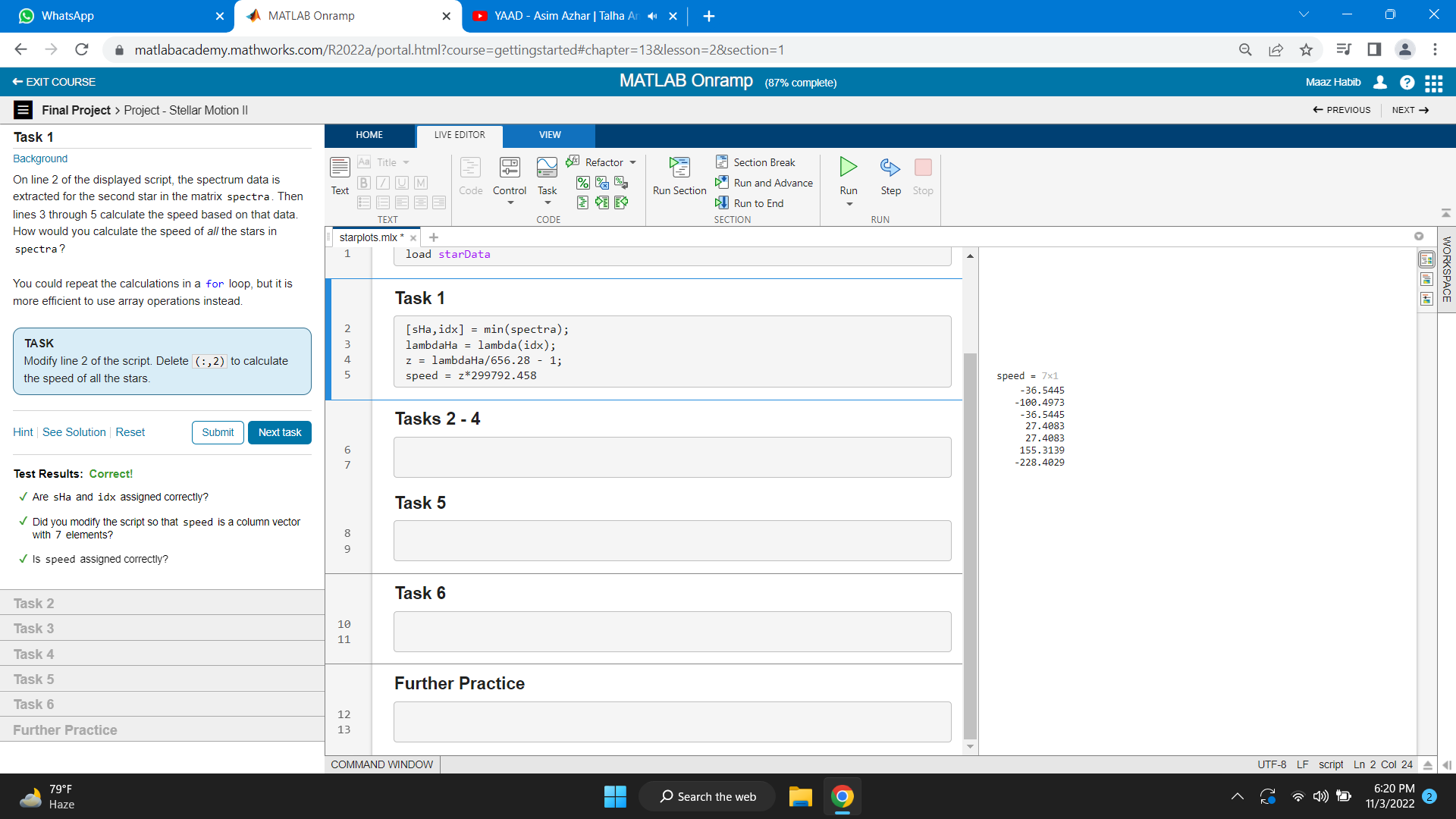


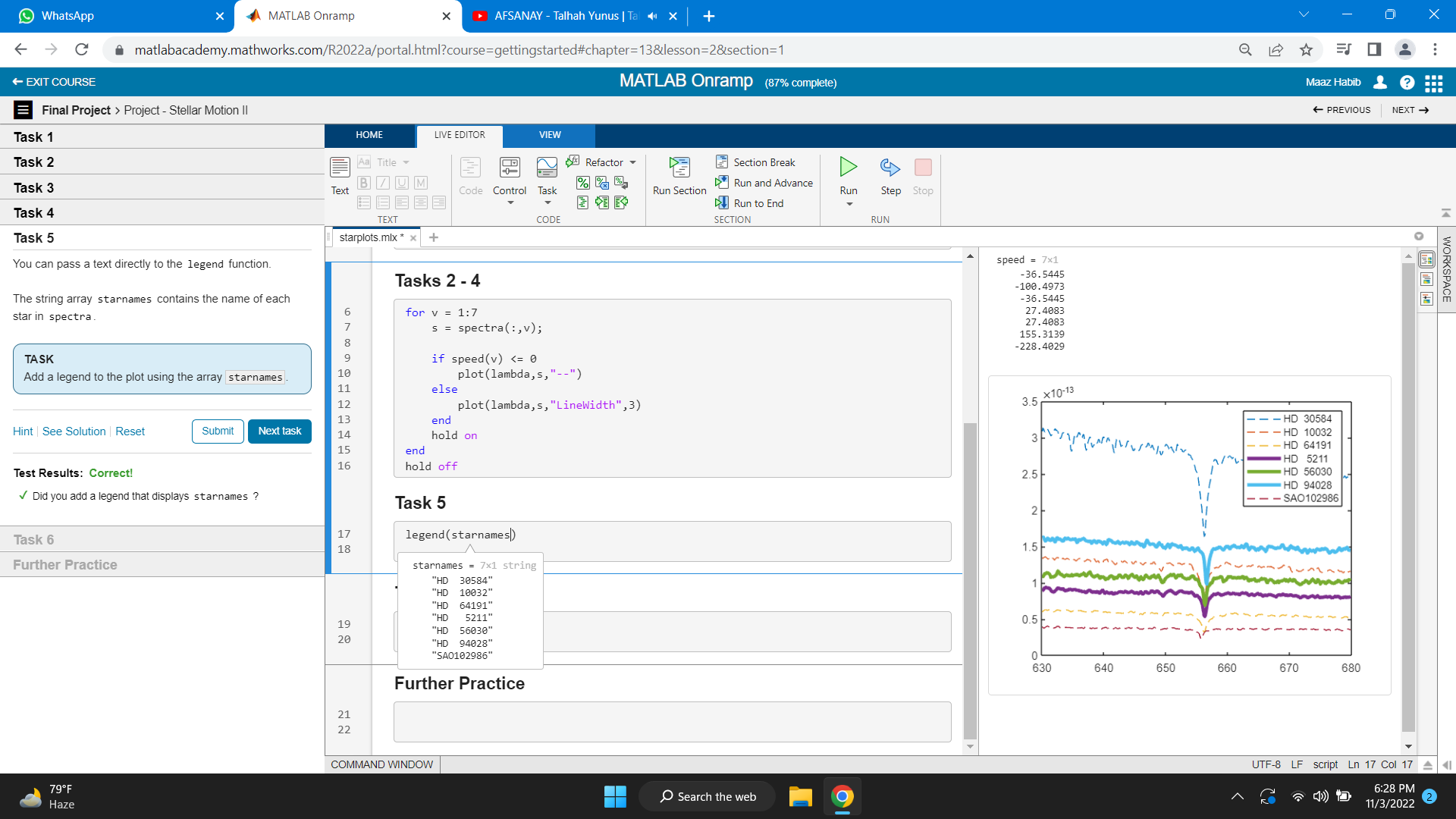


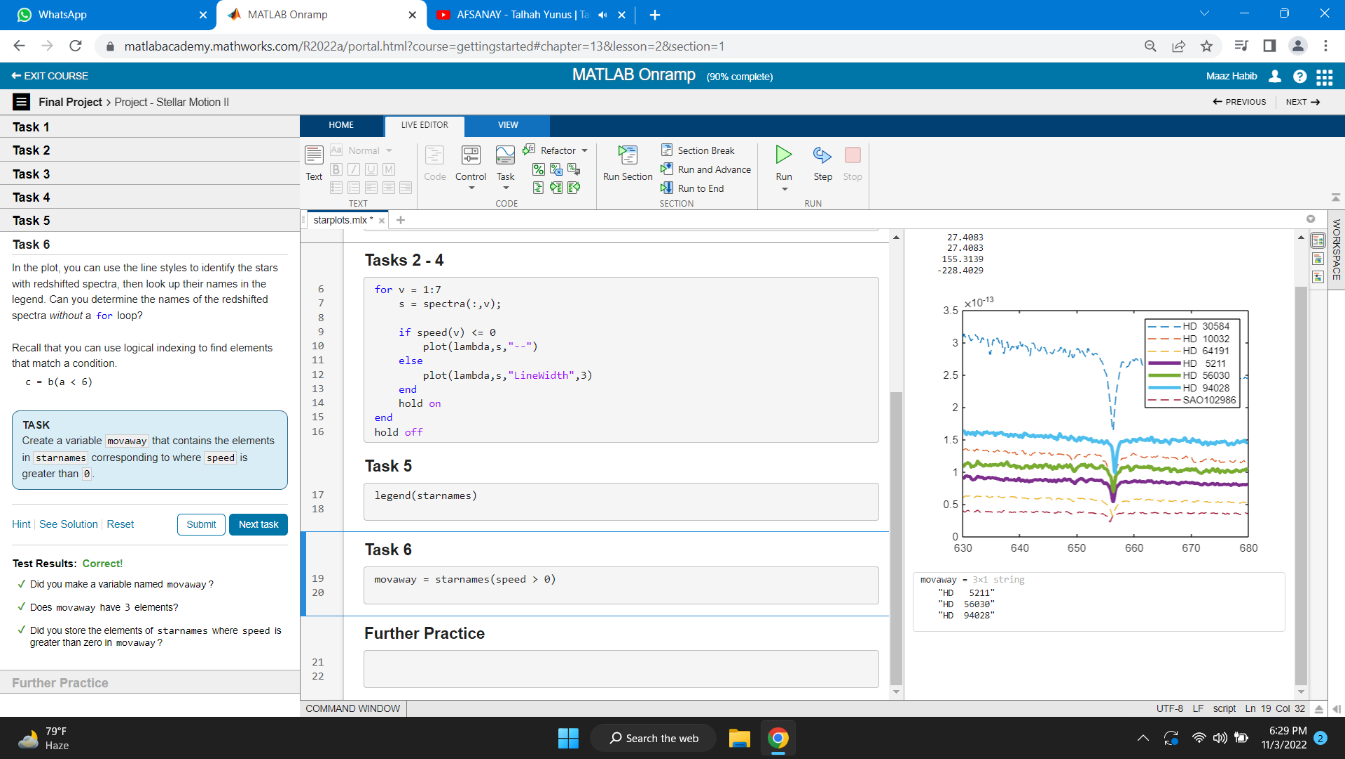


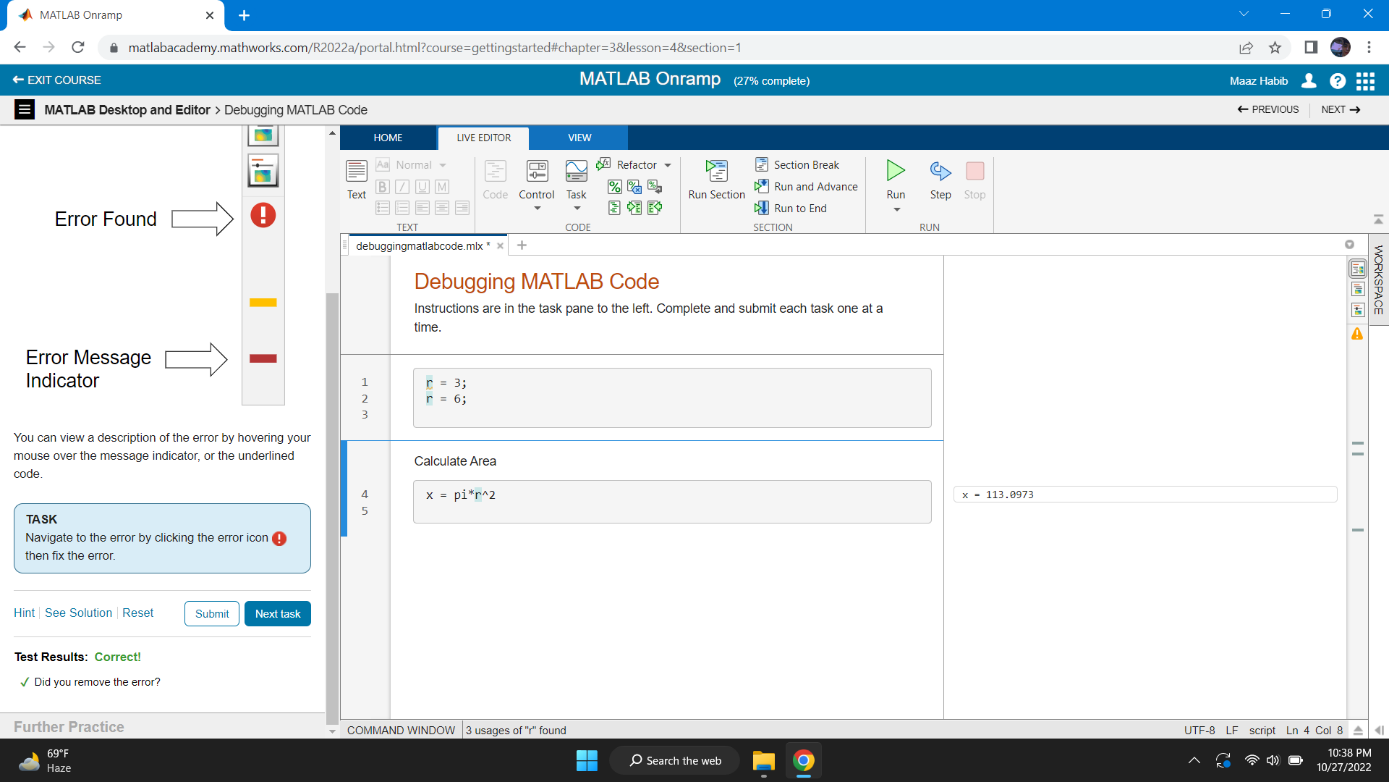
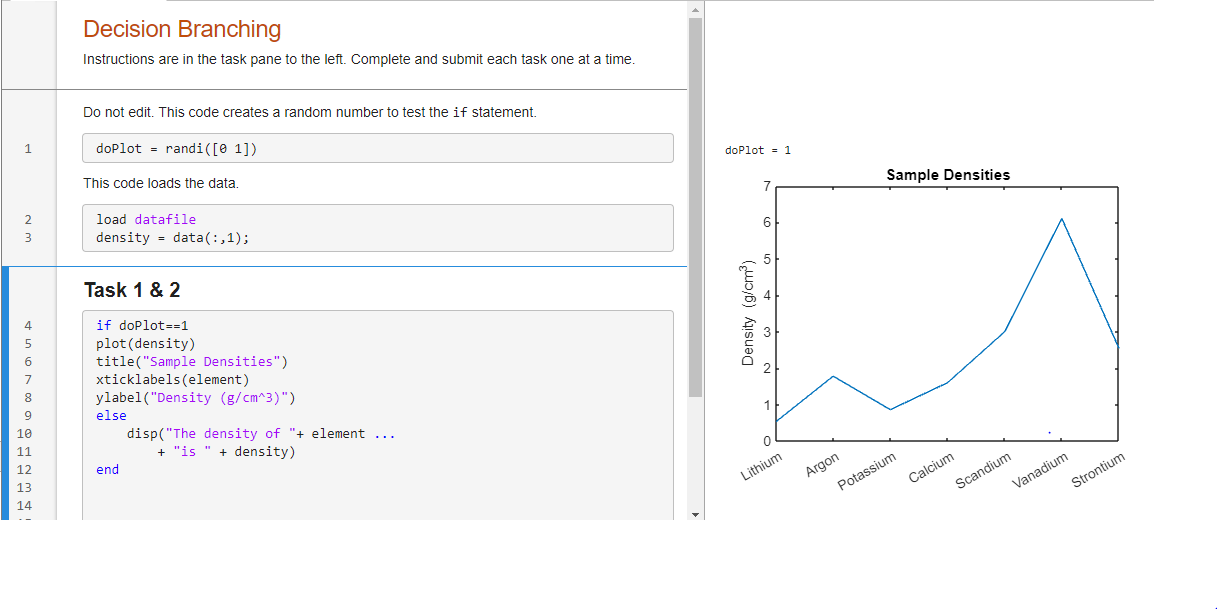


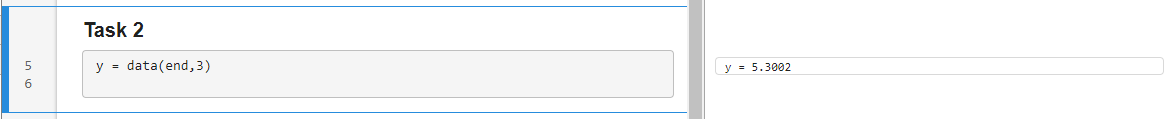
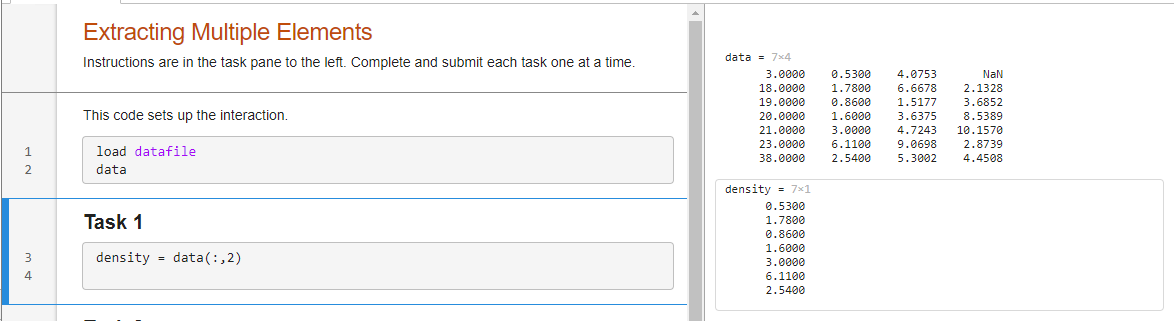
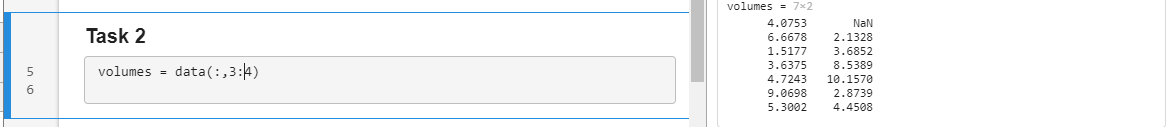
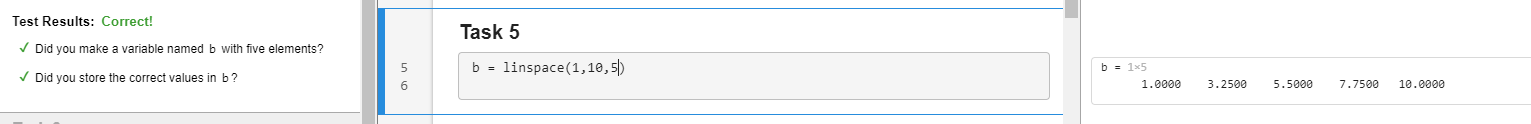












* Completiion of Course

