

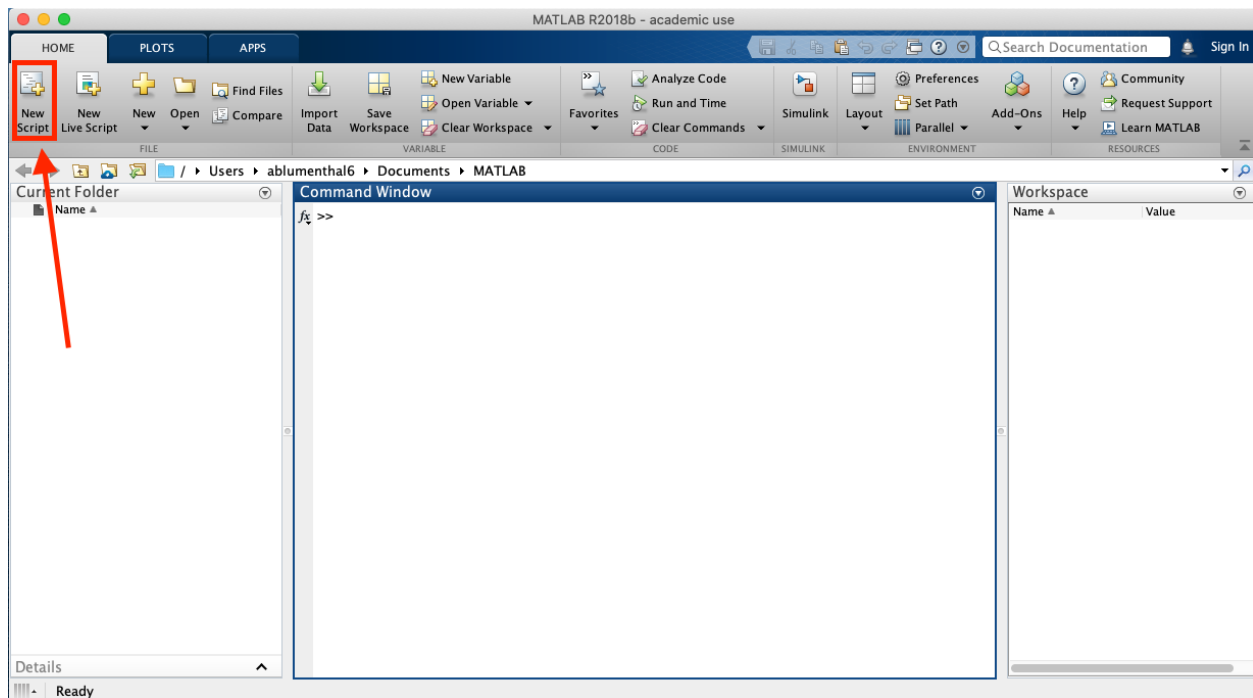
MATLAB intro

Installation:

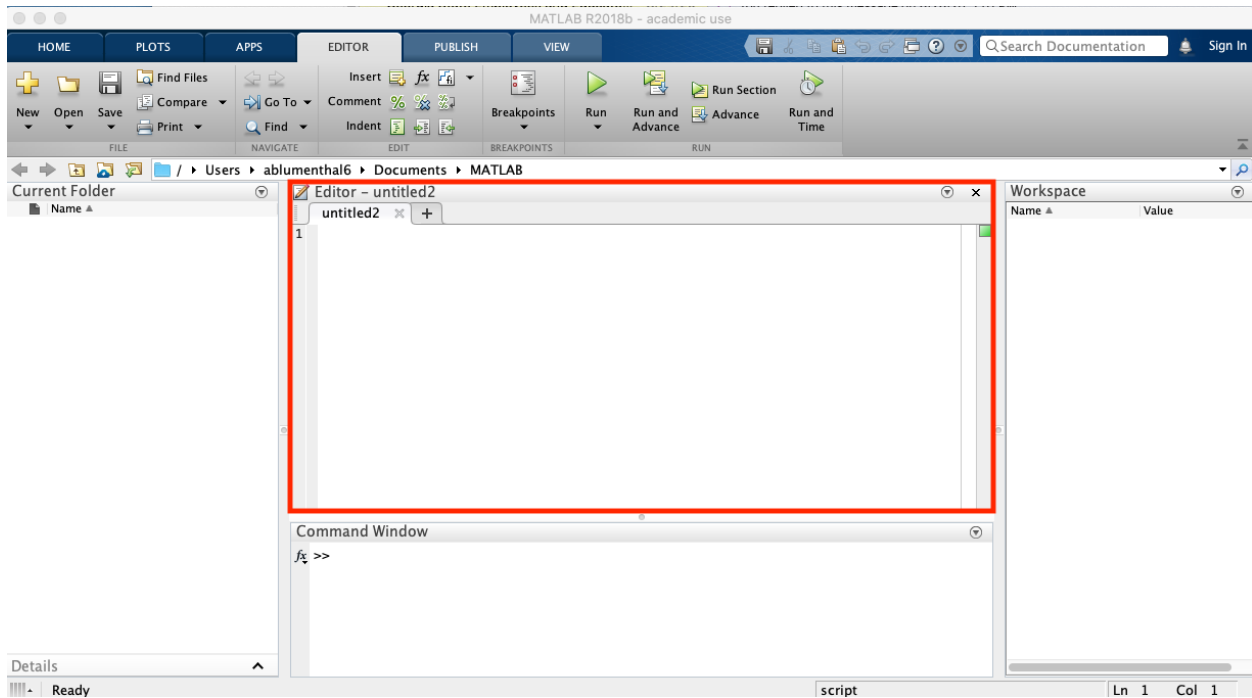
Consult the MATLAB installation instructions on Canvas to install MATLAB onto your personal computer (see MATLAB_GaTech_installation.pdf under the MATLAB directory on Canvas). Note: the last 32-bit version of MATLAB was R2015b; all later versions are 64-bit.

The bare basics:

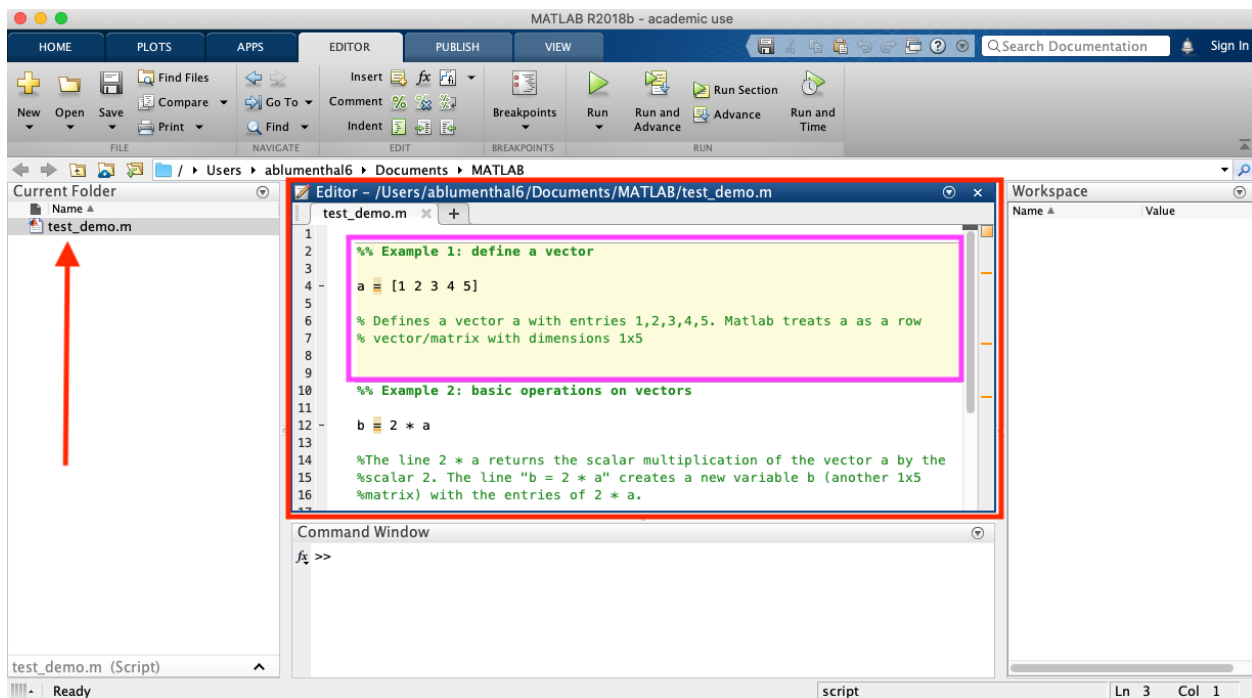
To start, launch MATLAB and press the “New Script” button at the top-left corner.



This creates a .m file, which is where you will write the MATLAB script used in your assignments. Script is written below in the “Editor” window:



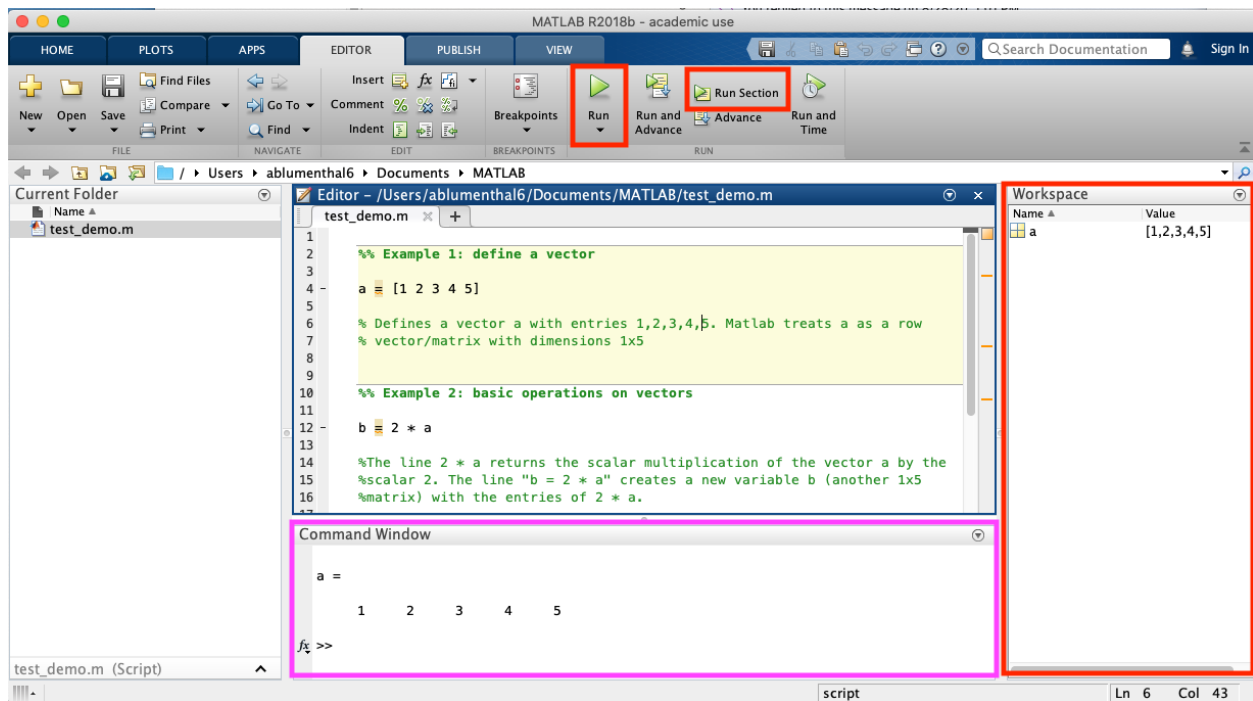
Before writing your own script, download the “test_demo.m” file from Canvas and move it to your MATLAB directory (by default, placed in “Documents” on Mac). Then, test_demo.m should appear in the left-hand “Current Folder” window. Click on it to bring test_demo.m to the Editor window:



Notice that the script in the pink box is highlighted yellow. This is one of the several *sections* comprising the Matlab script, and is demarcated above and below by the %%

comments (a single % comments out that line, while %% comments out the line and starts a new code section). When doing your MATLAB explorations assignments, you will be putting each numbered problem into its own section (yes, you are graded on this- tidy code is extremely important in industrial settings).

To run the code in a given section, hit the “Run Section” button. The nearby “Run” button runs the entire script in the current .m file. In either case, the output appears in the Command Window below, while variables assigned by the script appear in the right-hand variables list:



Read through the test_demo.m script for a brief overview of the way Matlab treats vectors, matrices and some basic operations on them.

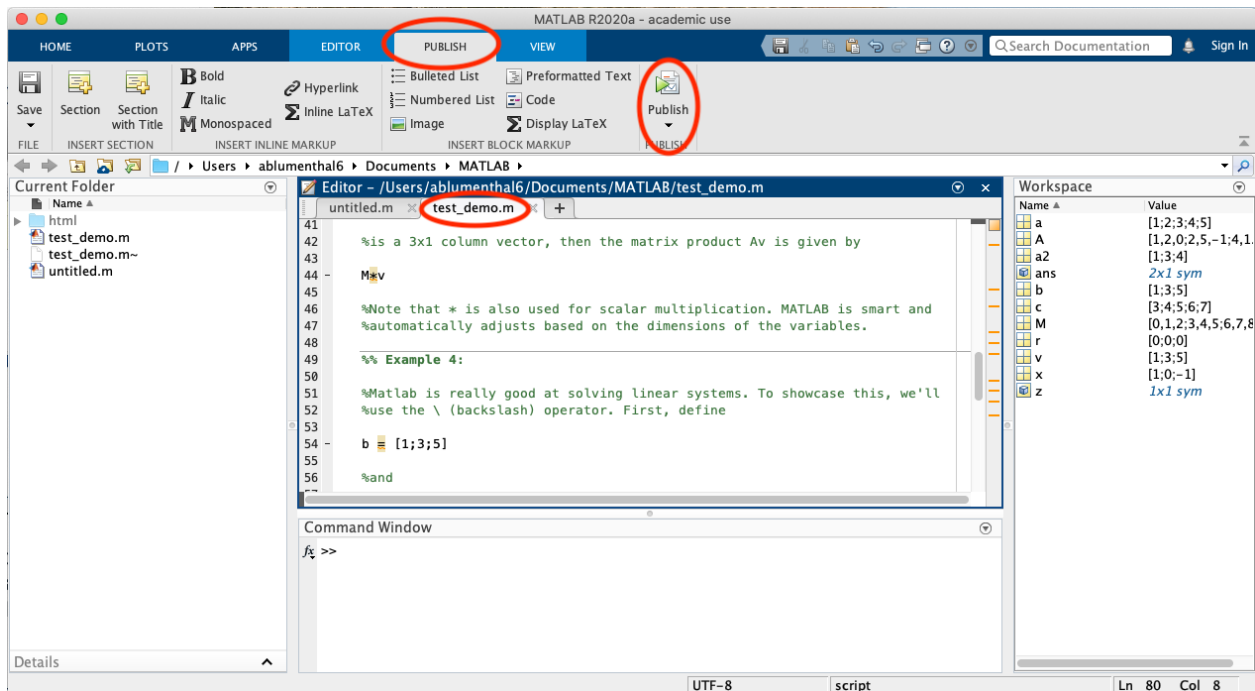
How to submit your work:

You’ve done your homework! That means:

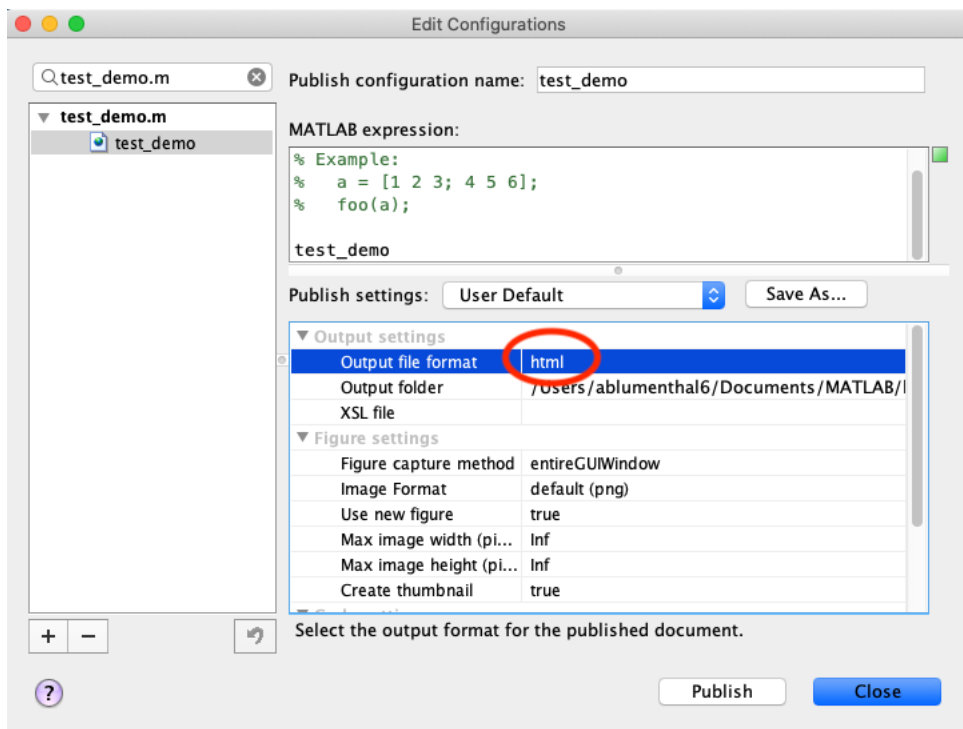
1. Each problem in the assignment has its own section, with a head like “%% Problem 3”. Written explanations (where asked for) are included in the document as comment lines.
2. You test-ran your entire code and it compiled without any errors.

Now you’re ready to publish your m-file as a pdf. To do this, make sure your homework script is selected in the editor window. Locate the Publish button on the toolbar, and

click the arrow beneath it, then in the dropdown menu select “Edit Publishing Options...”.



The default “Output” option is HTML. We’re going to change this output to PDF:



When you've changed this setting, hit the "Publish" button at the bottom of the menu. This will produce a PDF paring the code in each section with its output from the command window.

You can also create an .html file first, and then put the .html file in a browser window and create a .pdf from there.

Note: this is the only acceptable form (*i.e.*, .pdf of the output of "Publish" button) of homework submission - all other forms will be penalized.