

# Introductory Tutorial for Preparing Your MATLAB Homework

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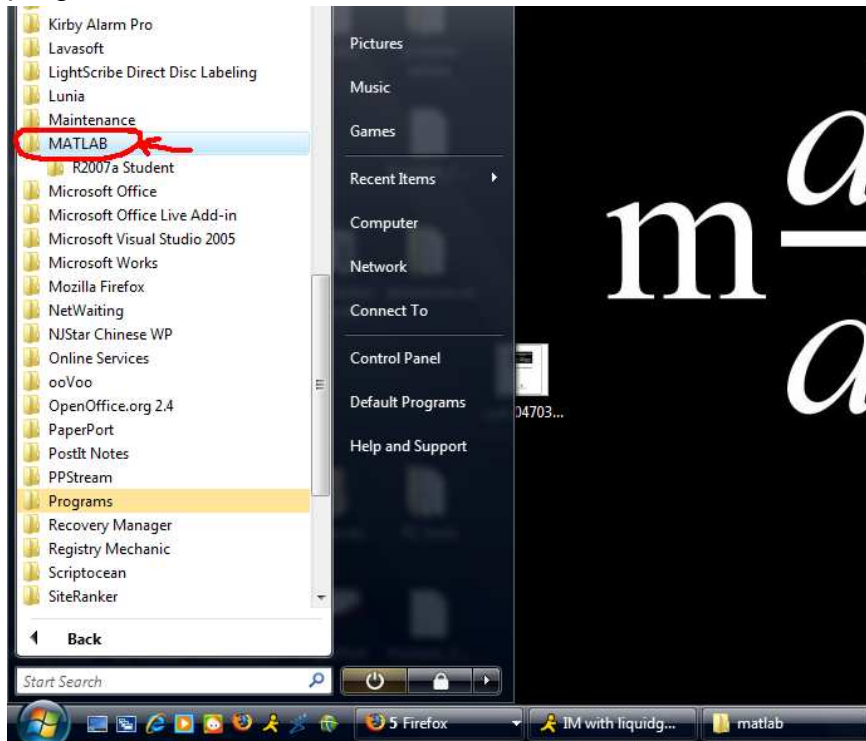
## 2. Logging into ACMS computers

If you already have a copy of MATLAB, you can do the MATLAB assignment from home. If you do not have a copy, certain ACS computers (for example, computers in CLICS and AP&M B432) have MATLAB installed. To log in to these computers, your login ID is your UCSD email address without the @ucsd.edu. Your password is the same password that you use for your email.

### 3.Starting MATLAB

**Note:** The section below include both written directions and a screenshot. Both contain the same information, so you may choose which style you prefer.

To start MATLAB, go to “START” at bottom left of the screen, then select “All programs.” Find MATLAB and click it to start.



### 4. Working with MATLAB

First, go ahead and create a new folder on the desktop and name it whatever you like (a good choice is to name it 'MATLAB'). This is where you will be storing all your work.

How does MATLAB work?

Using MATLAB is a 3 step process.

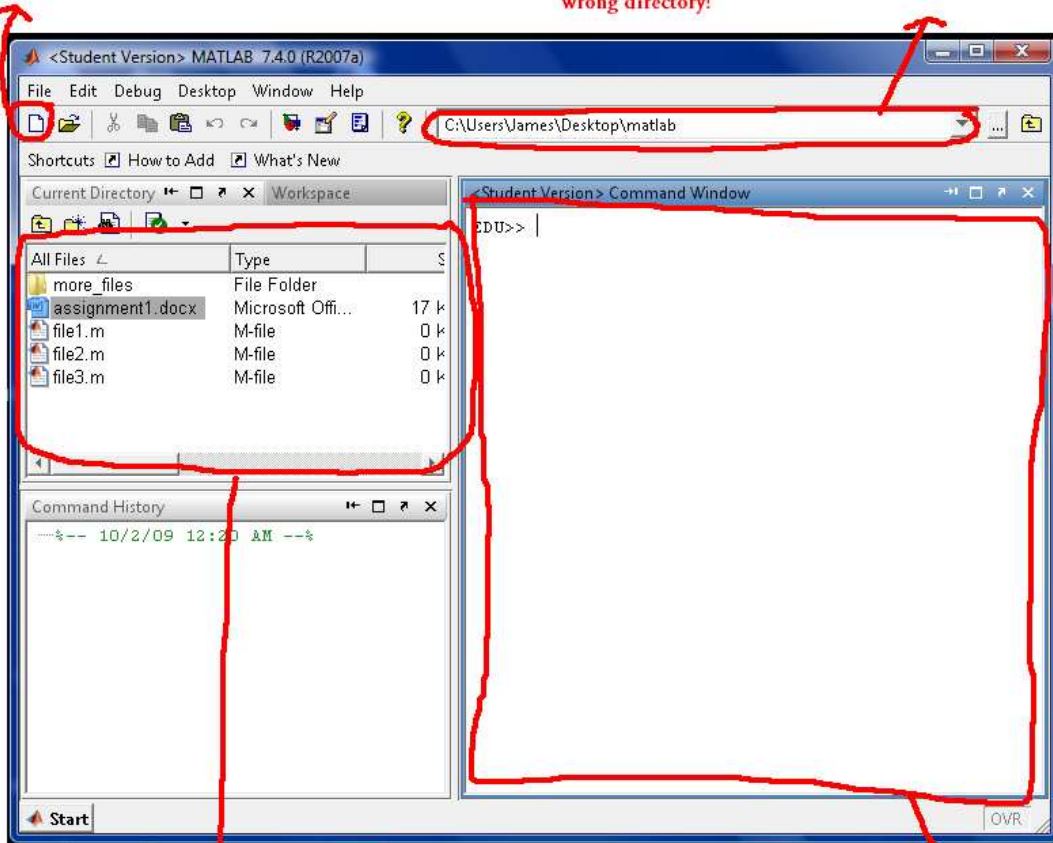
- 1). Write your code/calculation and save it as .m-file (for example, 'file1.m') in your newly created folder.
- 2). Type the name of your m-file in the command window and press enter to start processing your code.
- 3). View Result

## MATLAB Control Panel:

New m.file:

Click here to create a new m.file

Current Directory: click on the down arrow on the right to find the folder you just created. Note: Matlab may display error if you are working at the wrong directory!



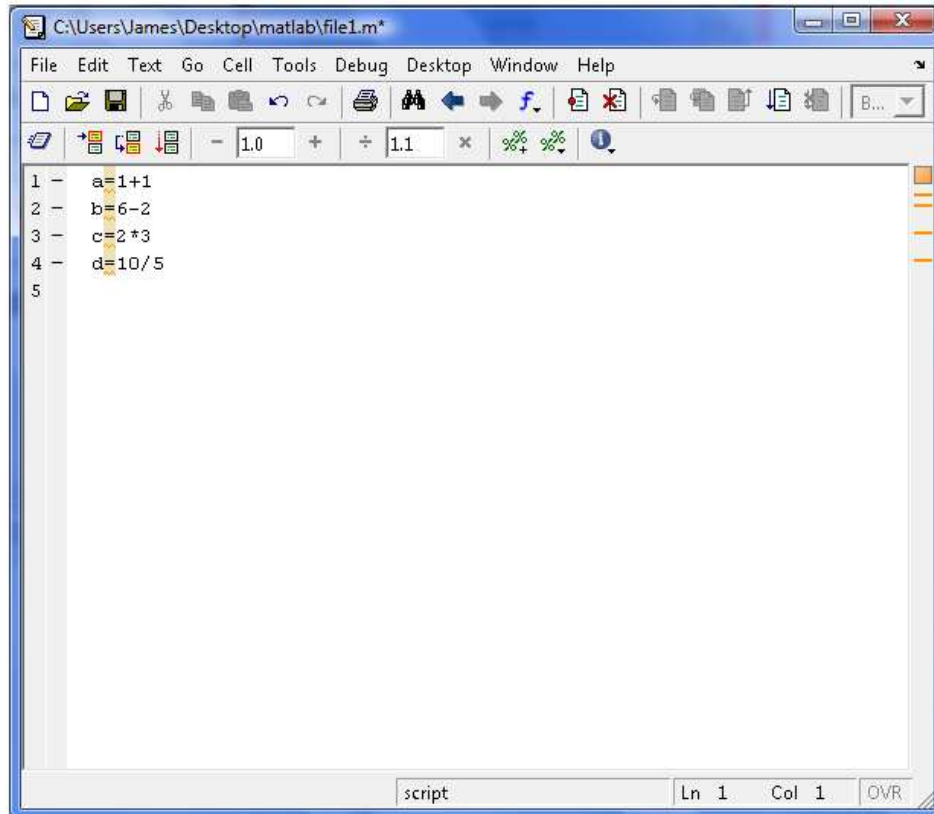
Directory Content:

Here displays the m.files you saved and can be edited by double clicking on the file.

Comm and Window:

Execute your m.files by typing the name of the file you wish to execute and press enter.

## Example of a .m-file (saved as 'file1.m')

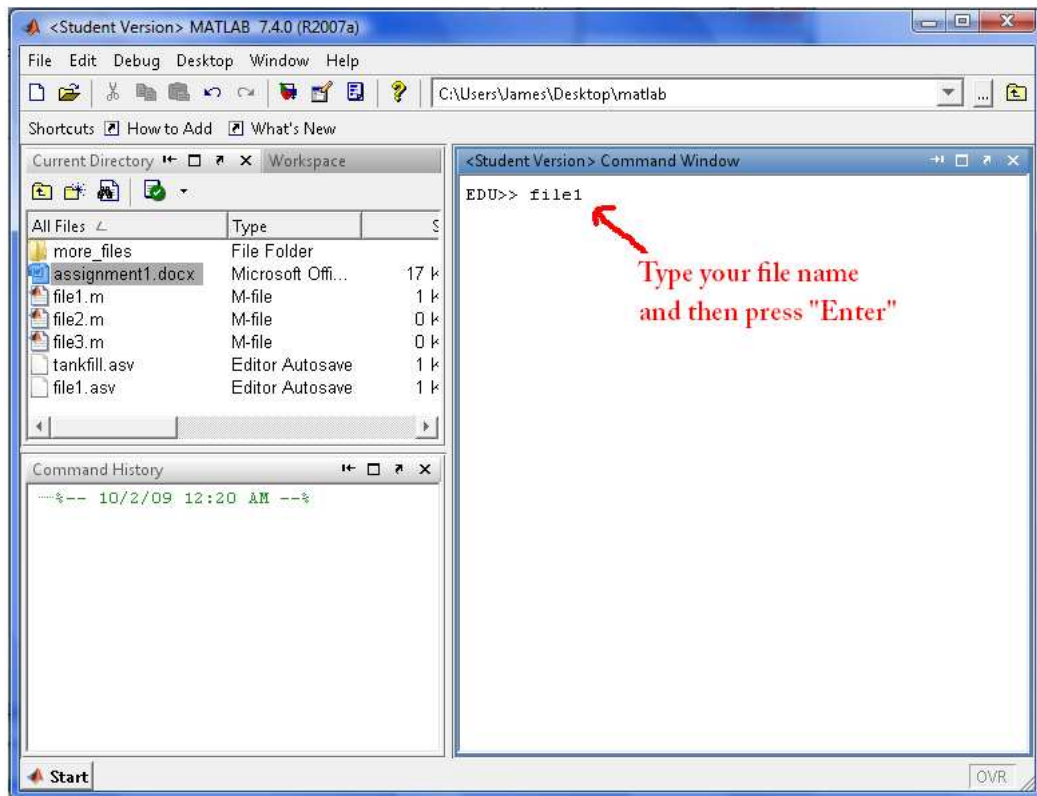


The image shows a screenshot of a MATLAB editor window. The title bar indicates the file path is C:\Users\James\Desktop\matlab\file1.m\*. The menu bar includes File, Edit, Text, Go, Cell, Tools, Debug, Desktop, Window, and Help. The toolbar contains various icons for file operations and editing. The main editing area shows a script with the following code:

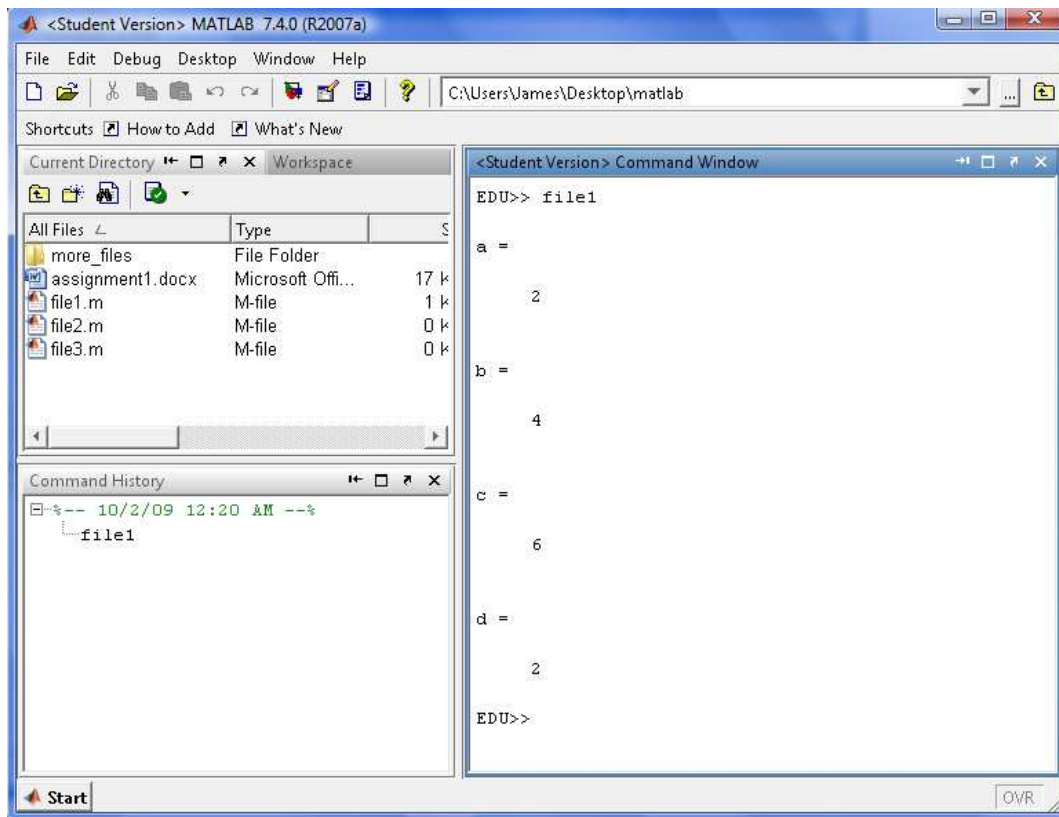
```
1 - a=1+1
2 - b=6-2
3 - c=2*3
4 - d=10/5
5
```

The status bar at the bottom shows 'script', 'Ln 1', 'Col 1', and 'OVR'.

## Command Window:



## View Result:



Check and see if the result makes sense. If MATLAB displays an error message that probably means you've either formatted your code incorrectly, which MATLAB is unable to recognize or you are currently working in the wrong directory.

Alternatively, instead of creating a .m file with all of your code, you can type commands directly at the command window and execute them there. It is up to you which method you wish to use.

Now you know how MATLAB works, go through each exercise and follow the three steps to complete each exercise. After you are done with your exercises, you can proceed to copy your codes from your .m-files (or the Command Window, if you didn't use a .m file) into Microsoft Word (see below), answer all the questions and finally print it out and submit it to your TA or professor before the assignment deadlines.

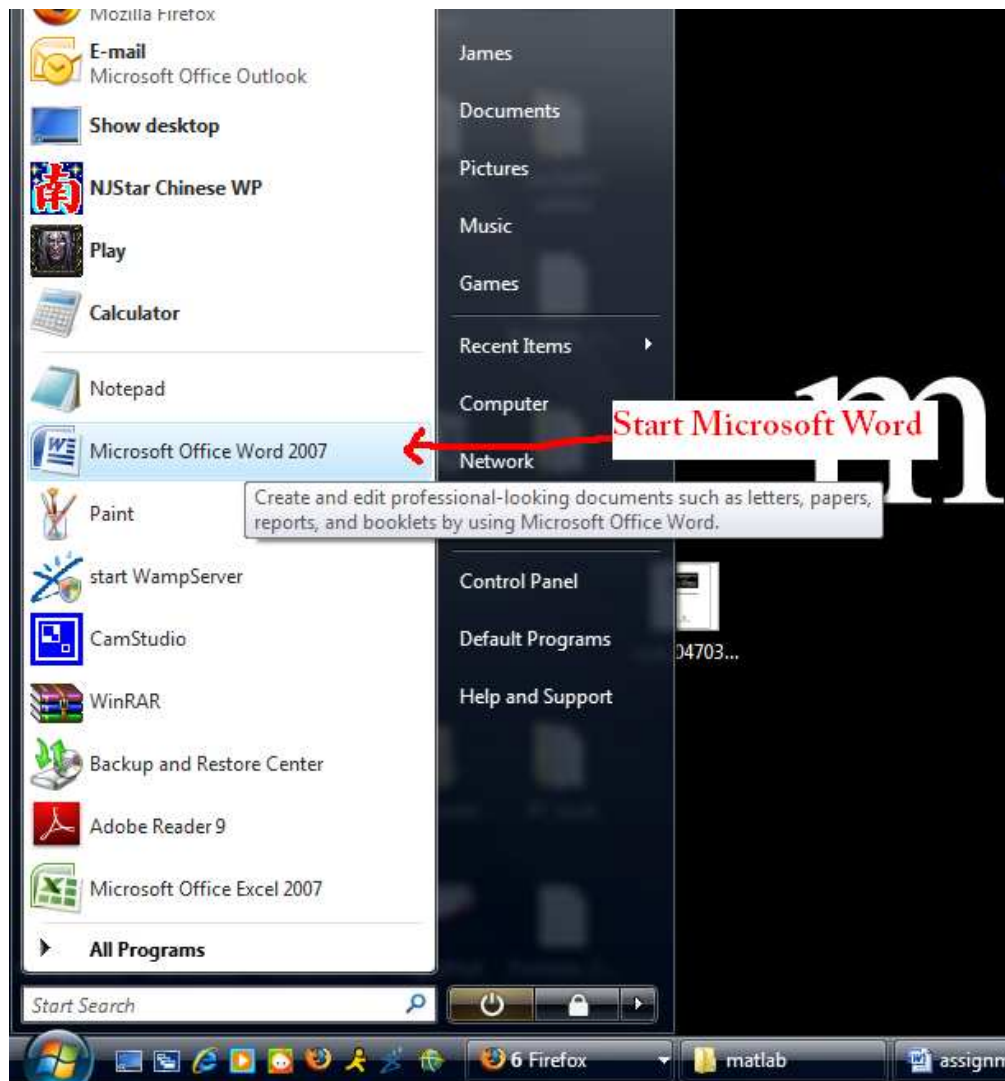
Assignment due dates can be found by visiting

[www.math.ucsd.edu/~math20f](http://www.math.ucsd.edu/~math20f) or [www.math.ucsd.edu/~math20d](http://www.math.ucsd.edu/~math20d)

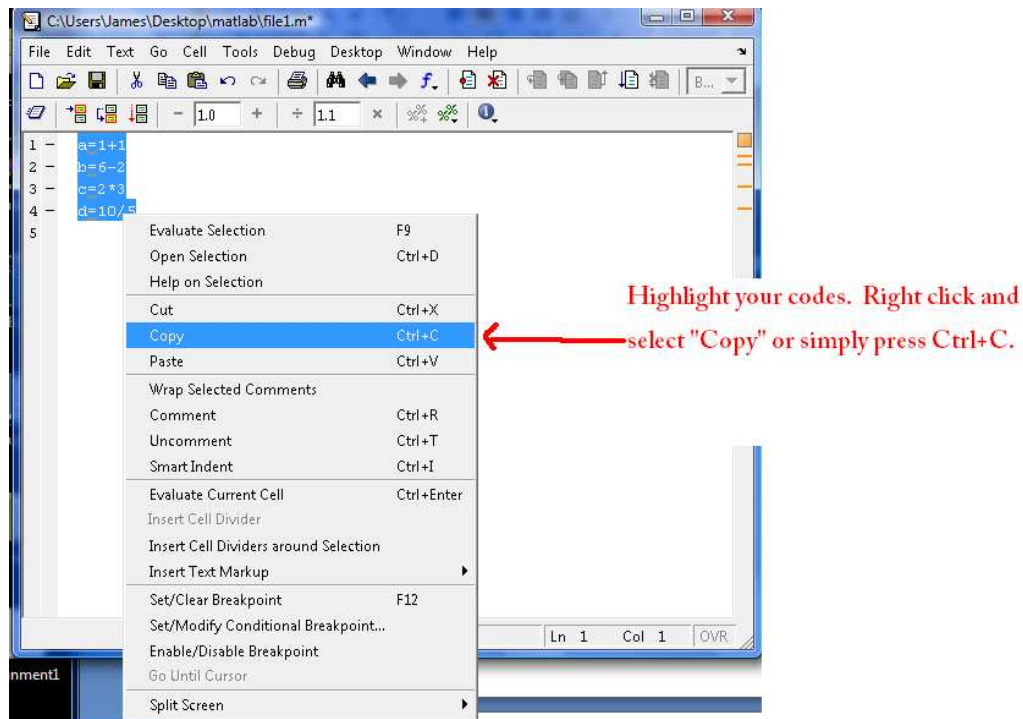
and clicking the 'Due Dates' link.

## 5. Using Microsoft Word

Click on “START” and find Microsoft Office Word 2007:



To copy:



Paste on to Word Document by Right click and select "Paste" or press Ctrl+V  
Be sure to include results using the same method in your Word document.

**Example of what a completed assignment should look like:**

(First and Last name)

(PID)

(Section)

(TA's name)

**Matlab Assignment 1**

**Exercise 1.1**

Code: (Copy the codes from your m-file)

```
a=1+1  
b=6-2  
c=2*3  
d=10/5
```

Output: (Copy the results from your command window)

a =

2

b =

4

c =

6

d =

2

Comment: (This is where you answer questions if specified in the exercise)

**Complete the rest of exercises along with the Feedback Exercise using the above format**

When doing your assignment, be sure to only include what is requested by the exercise.

## 6. Printing and Submitting

Once you have transferred all the codes and results onto a Word document, save it and print it. You can print at the computer lab by setting up a ACS laser printer account at

<http://www-ac.s.ucsd.edu/print/>.

Alternatively, you can print it out at home by e-mailing the assignment to yourself or saving it on a USB flash-drive. Finally, turn in the printed, stapled copy to your TA's MATLAB drop-box on the 6<sup>th</sup> floor of AP&M and you are done!