A First Introduction to MATLAB

The Interface:

- Command Window (enter commands here)
- Command History (double click)
- Current Directory (change current directory to where you have put the downloaded files)
- Help (F1) - extensive help menu

Beginning Commands:

- `cd` *directory* - change current directory (e.g. `cd z:\mcs255\lab`).
- `format compact` - MATLAB output in compact format
- ↑ - step through previous commands
- help(F1) - extensive help menu
- `who, whos` - list workspace variables
- `help` *filename* - lists some help lines in the script (e.g. `help informative`)
- `clc` - clear command window
- [1 2 3; 4 5 6] - enter a matrix $\begin{pmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \end{pmatrix}$
- [1 2 3; 4 5 6]′ - enter the transpose of the last matrix to get $\begin{pmatrix} 1 & 2 \\ 3 & 4 \\ 5 & 6 \end{pmatrix}$. (Notice the apostrophe.)

File Types:

- Script files. For example, `informative.m`. This is essentially a program file. It contains a number of MATLAB commands. To access a script file, make sure the file is in the current directory and enter *filename* (without the .m) in the command window.

- Data files. For example, `seqdata.mat`. These can be loaded by entering `load seqdata` in the command window.

Getting the .m files and the data files:

1. You should map your home directory (otherwise your work will be on the local machine you are using at the time), make a subdirectory for this course and maybe this lab, and save any files you want to save there.

   The files you will need are available at

   `http://www.gustavus.edu/~mmcdermo/mcs255/j06/lab/`.

   Right click on the files and save them either to the subdirectory of your home directory that you just created or to `C:MATLAB7\work`.

2. **Changing the current directory.** MATLAB needs to know where the mfiles are stored to access them. You should change the current directory to where the files are located either by typing `cd z:\mcs255\lab` in the command window or by editing the Current Directory in the MATLAB toolbar.