**CSCI 2150L**

**Session 1 Topics:**

1. Matlab Environment

* Command Window
* Current-folder window
* Workspace window
* We also discussed a feature in MATLAB 2014 that allows you to access previous commands when you press up arrow ↑.

1. Matlab Editor

* Matlab scripts (creating .m files for writing programs containing multiple commands)
* Saving scripts
* Running the scripts

1. Scalar Operations

* Addition (+)
* Subtraction (-)
* Multiplication (\*)
* Division (/)
* Raising to the power (^)

1. Introduction to some mathematical functions

* **sqrt**(x) to find square root of x.
* **exp**(x) to find .
* **log**(x) where the base of logarithm is *e*.
* **log10**(x) where the base of logarithm is 10.
* **abs**(x) to find the absolute value of x or .
* **sign**(x) to find whether x is positive or negative.
* **round**(x) to get the nearest integer of x.
* **floor**(x) to find greatest integer less than x; Mathematically denoted as
* **ceil**(x) to find least integer greater than x; Mathematically denoted as
* **fix**(x) to round x towards 0. The difference between fix and round can be better understood by an example. For instance 3.93 will be fixed to 3 whereas if it is rounded will give you 4.

1. Special numbers **pi** (), **inf** (infinity or ), **nan** (not a number, for e.g. etc.), **realmax** (the maximum number matlab can provide), **realmin** (the minimum number in matlab).
2. Environment variable

* **clc** to clear command window.
* **clear** to empty workspace window
* **format** **short** and **format long** to change the resolution of display of the numbers on command window.