MAT LAB (matrix laboratory)

Class 1 : (12 jan 2024)

Introduction to matlab :

% is used for comments ; what ever written after the ‘%’ is considered as a comment ;   
  
Operators in MatLab

^ 🡪 it is used for the Power   
example : 2^3 🡪 two power of three , that is 2\*2\*2 =8   
  
+ 🡪 it is used for the Addition   
- 🡪 it is used for the subtraction  
\* 🡪 it is used for the multiplication

/ 🡪 it is used for forward division   
Example 4/2 here 4 is divided by 2 so the answer is 2 ;

\ 🡪 it is used for Backed division  
Example 2 : 2\6 here the denominator 6 is divided by 2 so the answer is 3;  
  
  
  
Order of Precedence in matlab (left to right )  
  
1.parenthesis   
2. Exponentiation

3.multiplication and Division with equal precedence

4.Addition and subtraction

Commands in MATLAB

* clc 🡪 it will clear the console
* clear 🡪 it will clear all the saved data
* clear x y 🡪 it will clear the x and y data
* exist(‘abc’) 🡪 with this command matlab will check if there is any file with abc or any variable named as abc . if exist it return 1 or it returns 0
* quit 🡪 this command is used to Exit from the MATLAB software.

who 🡪 this command will Lists all the variables in the memory

whos 🡪 this command gives all the variables list with size and indicate if they are imaginary .  
  
: 🡪 colon is used to generate an Array in Matlab

Example : 0:1:9  
  
it will give 0,1,2,3,4,5,6,7,8,9  
starts from 0 to 9 with difference 1 on each element

; 🡪 semi colon is used for the new row and supressing the screen printing ;

… 🡪 it is used for the continuation of the line (Ellipsis)

* “eps” is used to get the accuracy of the floating point percision .
* “Inf” Infinity
* “ Pi” is 3.147