Introduction

What is MATLAB?

Why we need MATLAB?

How to use MATLAB?

MATLAB work environment:

* Command window نكتب فيه الاوامر بالتتابع (نفذ امر تلو الاخر)
* Work Space (نحفظ فيه المتغيرات \_ يمكن استدعاء المتغيرات اذا وفقط اذا كانت فيه)
* Current folder (الملف على الجهاز الذي يجري عليه العمل)
* Command History (تاريخ العمل)
* Editor window (نافذة تنفيذ الاوامر سويه)

MATLAB NUMBERS:

* Fixed point
* Floating point

Arithmetic Operations

Example: Write sequence of commands to implement the following functions:

X=2;

D=3;

C=4;

(d\*c + 2)^0.5

(2/d)\*c^(x+2)

Order of Evaluation

* Parentheses, innermost first الاقواس
* Exponentiation الاس
* Addition (+) and subtraction (−) with equal precedence, left to right الجمع والطرح

Commands

clc

Clear

Exit,

Quti,

Pi

Saves

Who,

Whos

X=1

Y=2

M=3

(

MATLAB types

* Vector
* Scalar
* Matrix

Next CLASS

-colon operator

-linespace command

- dot operator

-number formats

-constructing vectors and matrix

-help and documents

-Some math functions, Trigonometric functions, statistical functions, data analysis functions, Random functions, Complex functions,

-Manipulating matrices