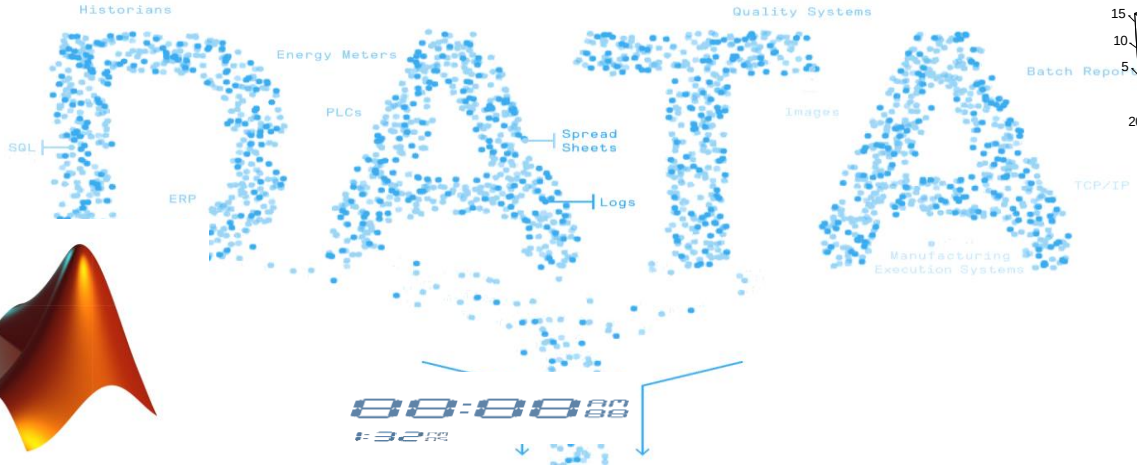
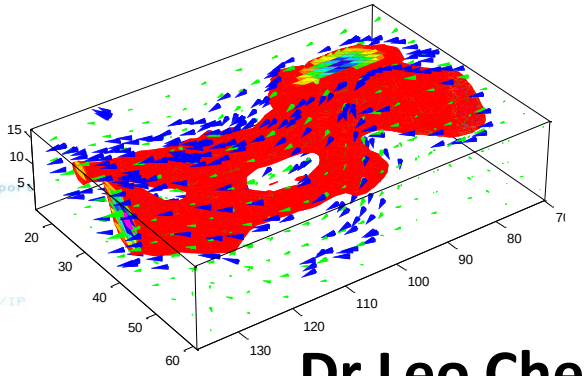
MATLAB Fundamental Laboratory Handbook (MATLAB)

Chapter 1 Introduction





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1. 1 Lab

Objective: Get familiar with MATLAB Environment, create and view a matrix.

Content:

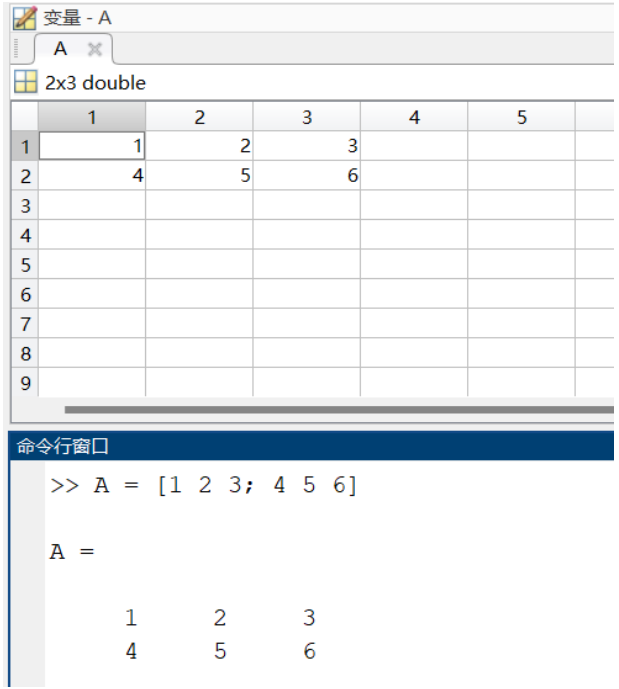
Step1: Create A matrix A with 2 rows and 3 columns.

```
>> A = [1 2 3; 4 5 6]

A =

   1   2   3
   4   5   6
```

Step2: Locate the MATLAB workspace and double-click to view A.



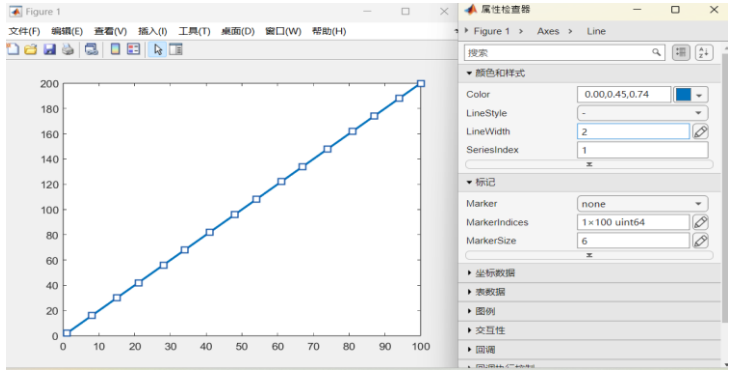
1.2 Lab

Objective: Get familiar with command window, doc function, Figure operation

Content:

Step1: On the command line, create an array x with the natural numbers from 1 to 100.
Step2: Create array y, y=2*x.
Step3: On the command line, use the doc plot command to see how the plot function is used in the help.
Step4: Draw the image with x as the horizontal coordinate and y as the vertical coordinate
Step5: In the Figure interface, adjust the LineWidth of the curve of the image to 2 by editing -> current object properties.
Step6: In the command history, select the commands used in the previous steps, copy these commands to a new m script, and save the script.

```
%% lab1.2
x = 1:100; % Creat x
y = 2*x; % Creat y
plot(x,y) % draw the figure
```



1. 3 Lab

Objective: Get familiar with creating favorite (收藏夹)

Content:

Step1: Based on Lab1.2, input close all in the command line to observe the change of the Figure window.
Step2: Enter clear in the command line and observe the change of variables in the workspace.
Step3: Enter clc in the command line and observe the change of the command line.
Step4: In the home page -> Favorites, create a new favorite item (the label is set to clear up), and enter the above command into the code area, and save.
Step5: After repeating Lab1.2, click clear up in the favorites and observe the changes of Figure, workspace and command line window again.