



Course N°05

Script / Editor

in MATLAB



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1. Constructing a script (program) in MATLAB

For simple problems, entering commands at the MATLAB prompt in the command window is simple and efficient. However, when the number of commands increases, or you want to change the value of one or more variables, reevaluate a number of commands, typing at the MATLAB becomes tedious. You will find that for most uses of MATLAB.

This section covers the following points concerning script/editor; how to :

- ✓ Open or create a script window
- ✓ Write a name of script in MATLAB
- ✓ Select a folder to save the script in MATLAB
- ✓ Write commands and functions in script
- ✓ Run script and display the result
- ✓ Write comments in order to remember
- ✓ Print the results

Notes.

- ❖ When script or editor is executed, all its variables are displayed in workspace window (see fig.9).
- ❖ It is useful to use functions such as (clc, clear all, format,...) in script file to improve the results (see fig.3).
- ❖ If you try to run script and your script is not in the current folder whose path is listed in the current folder toolbar, a dialog box will appear giving you the option of changing the folder listed in the current folder toolbar to the folder containing your script (see fig.10)
- ❖ Do not use a variable name that is same as a file name.

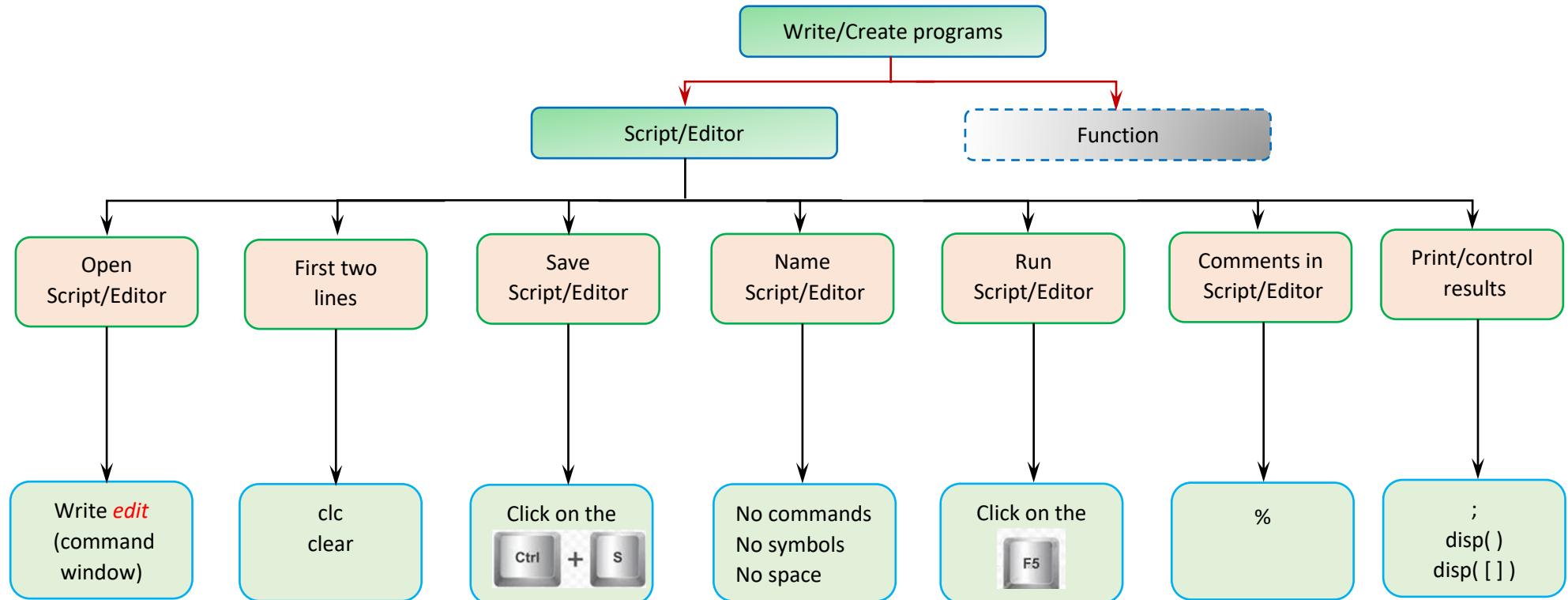


Fig 1. Summarizes the steps for writing a script in MATLAB

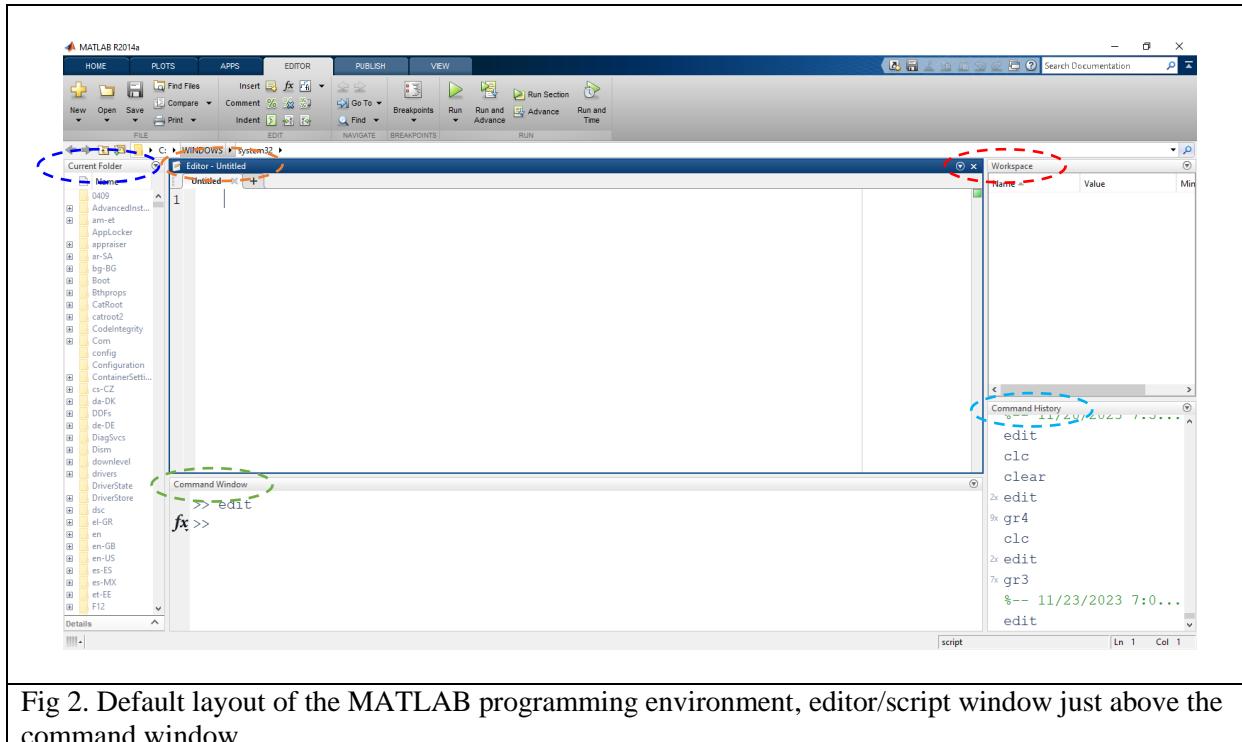


Fig 2. Default layout of the MATLAB programming environment, editor/script window just above the command window

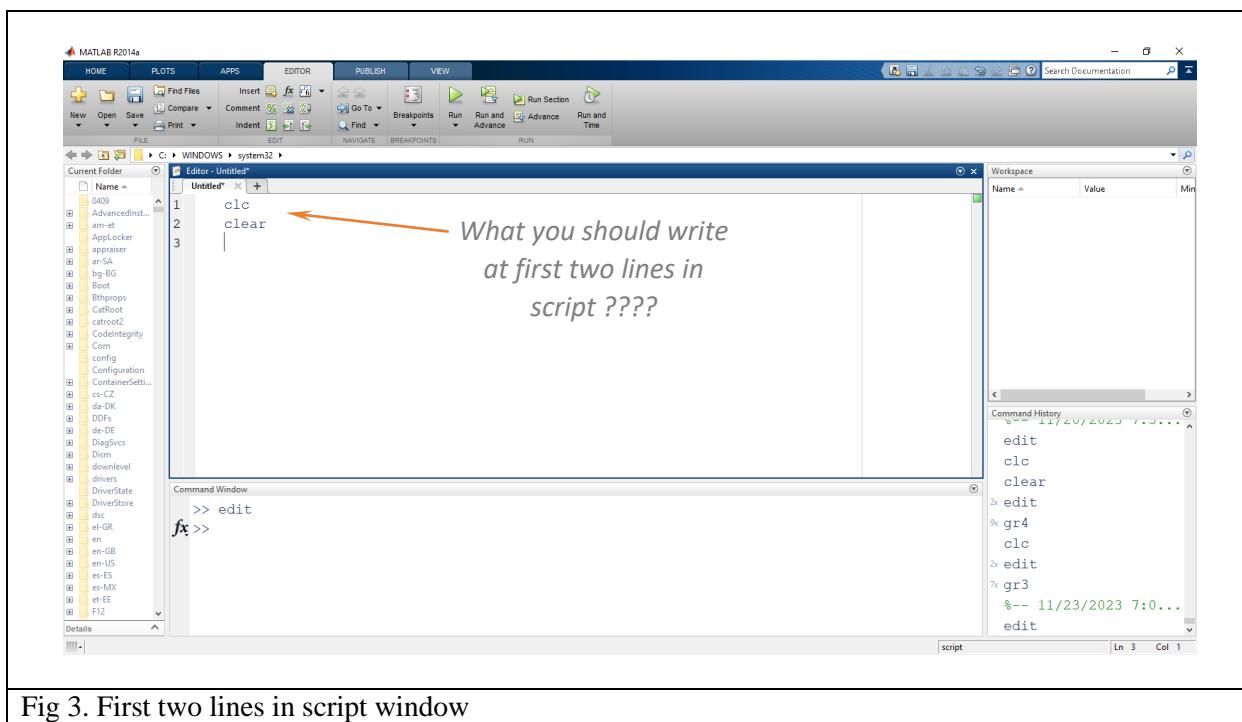


Fig 3. First two lines in script window

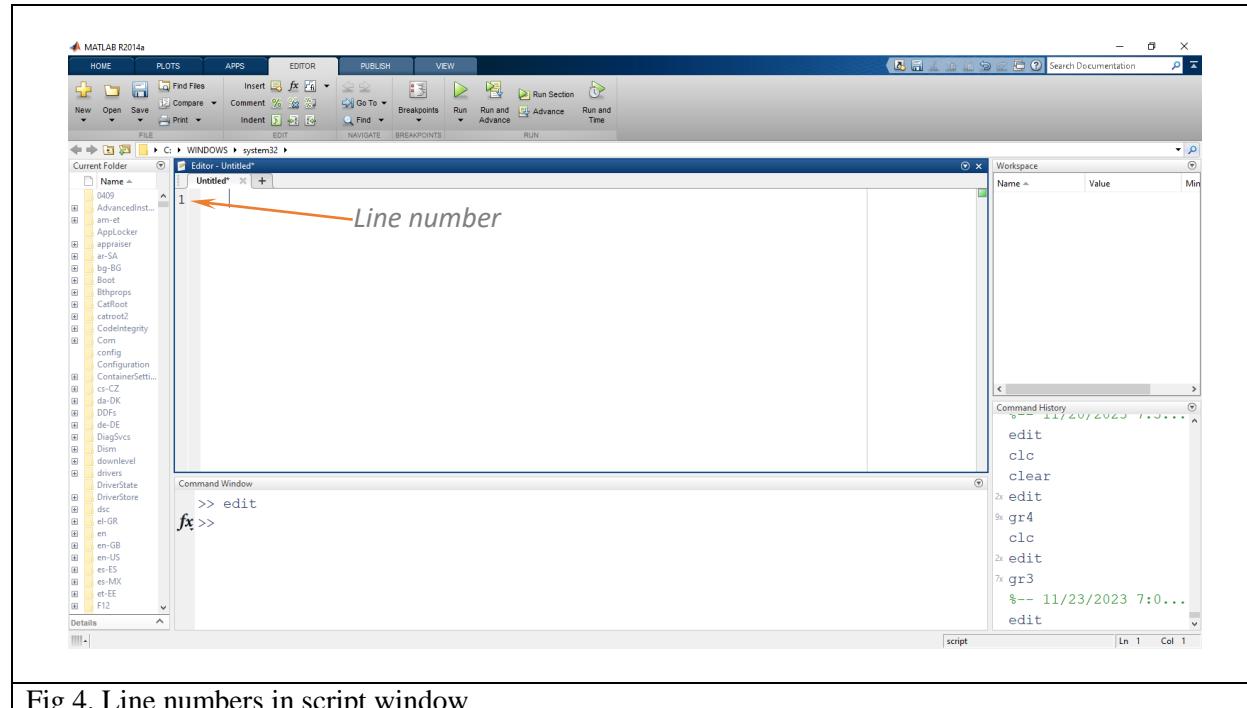


Fig 4. Line numbers in script window

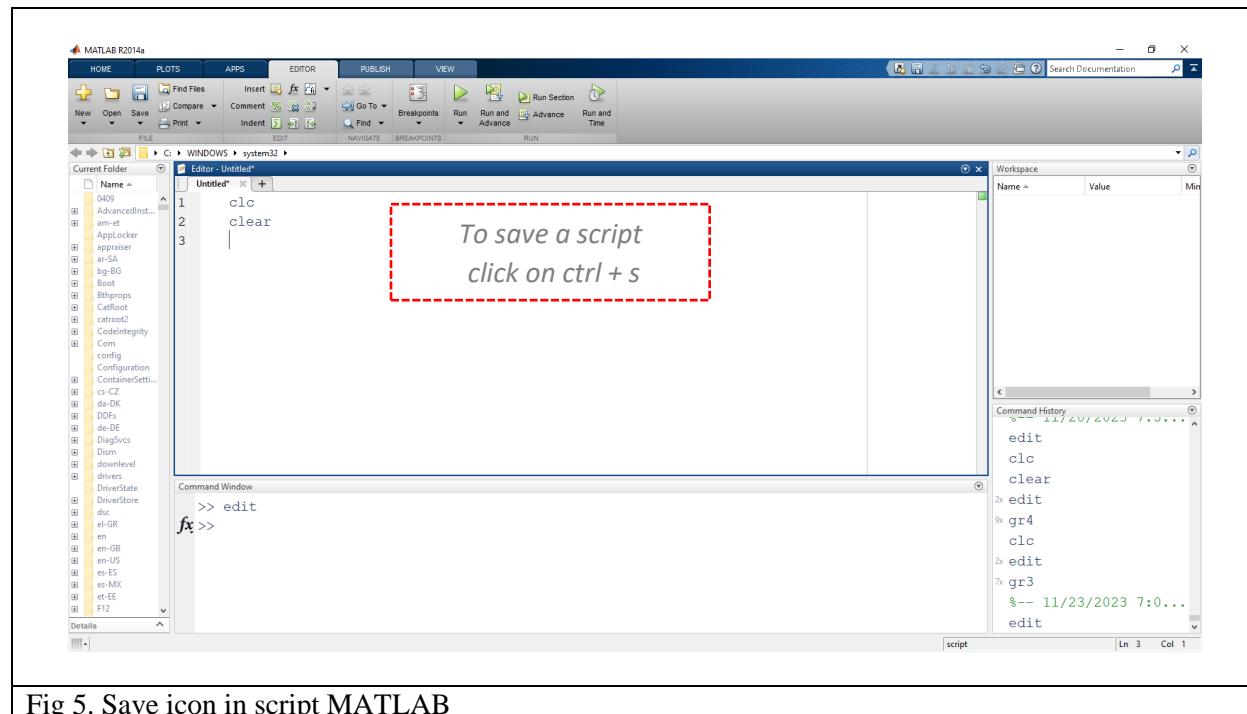


Fig 5. Save icon in script MATLAB

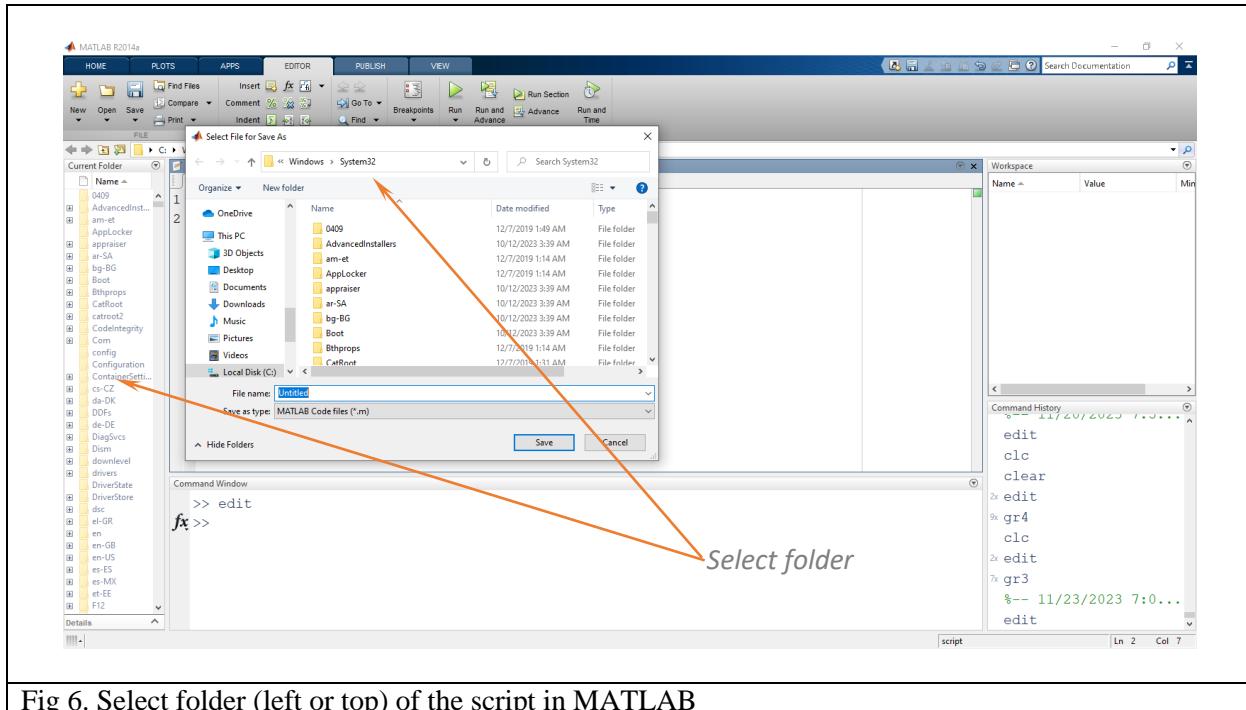


Fig 6. Select folder (left or top) of the script in MATLAB

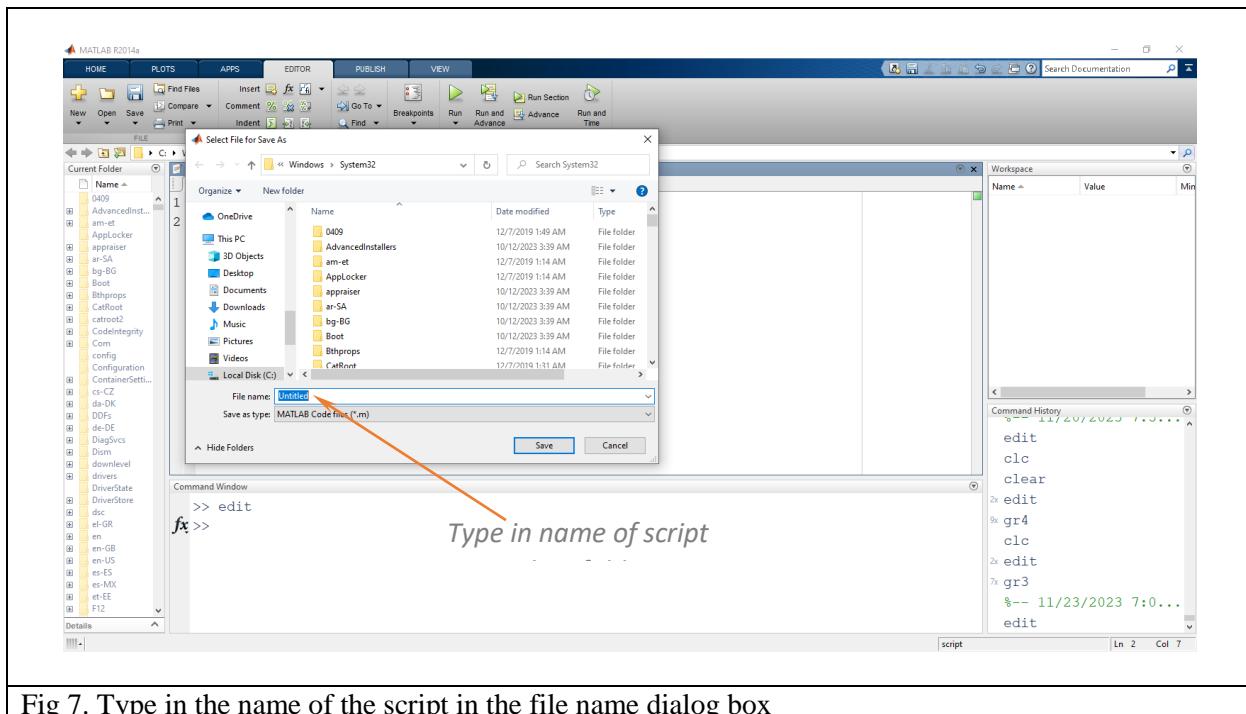


Fig 7. Type in the name of the script in the file name dialog box

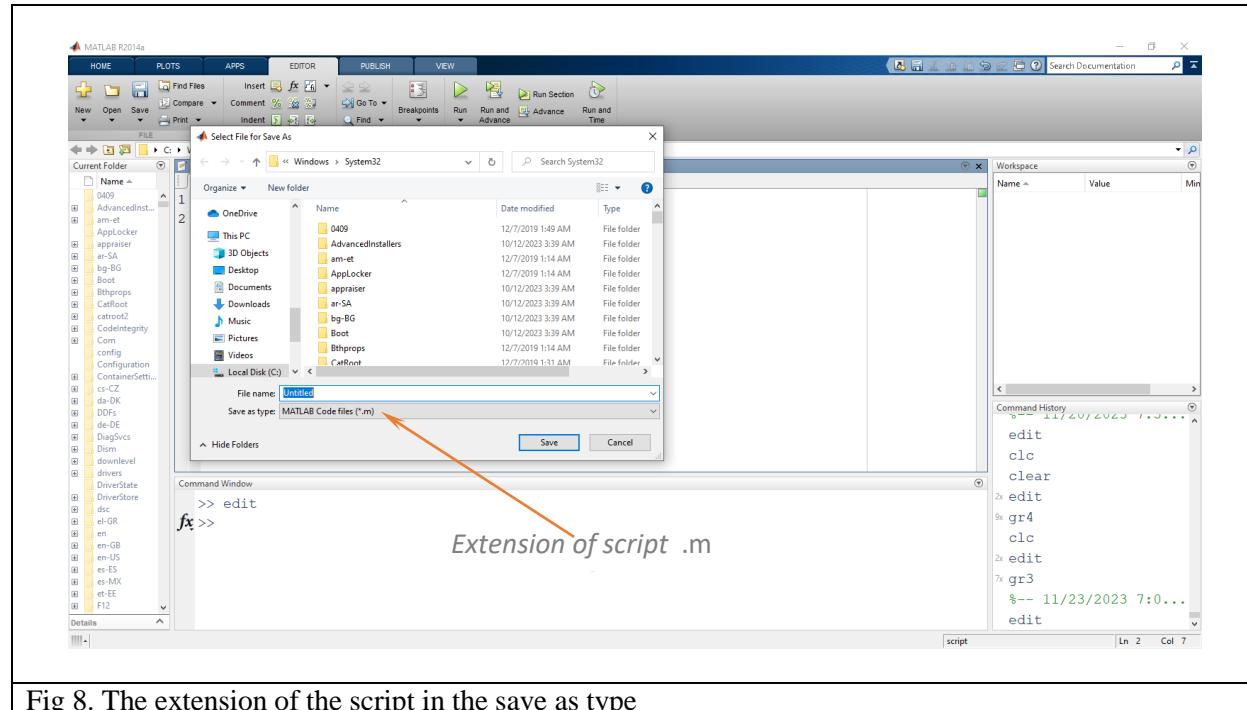


Fig 8. The extension of the script in the save as type

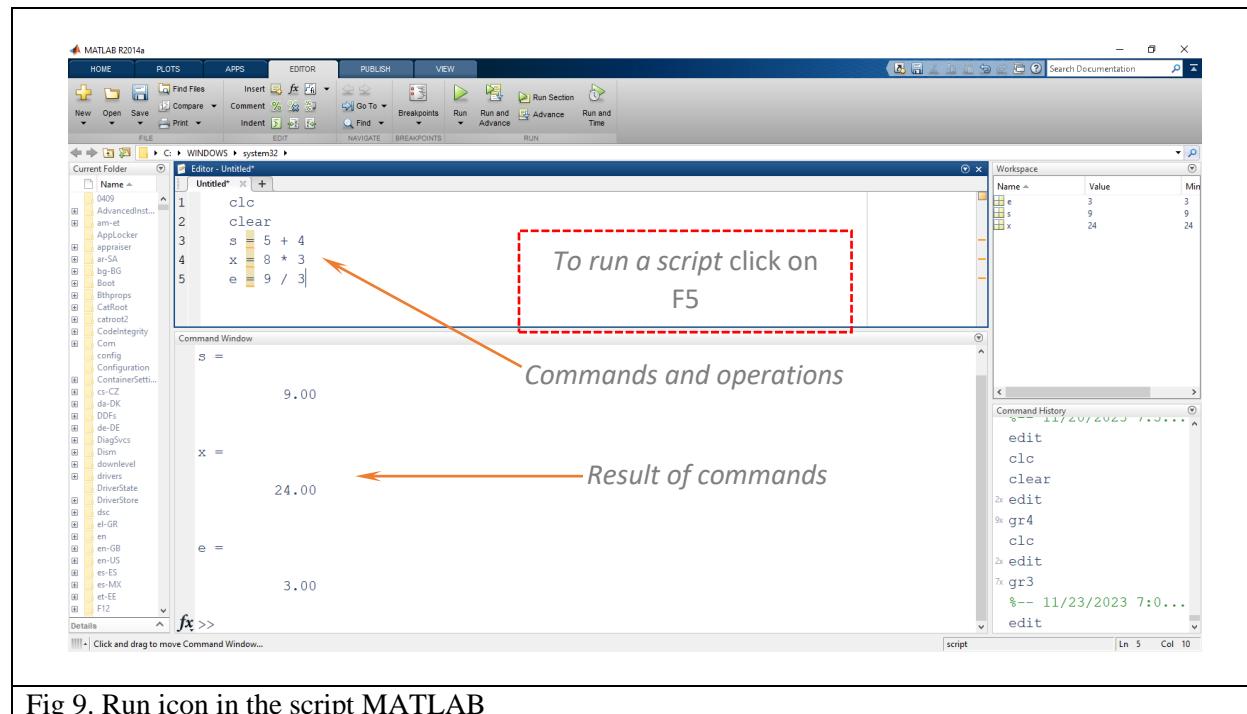


Fig 9. Run icon in the script MATLAB

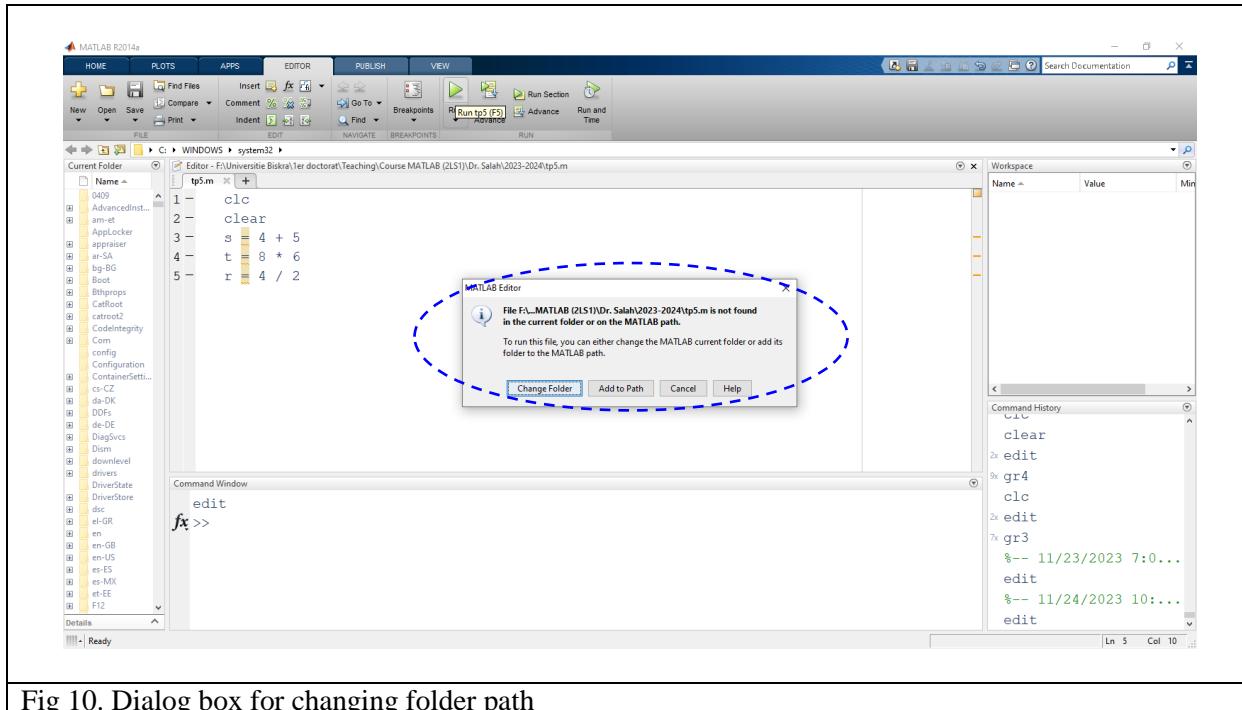


Fig 10. Dialog box for changing folder path

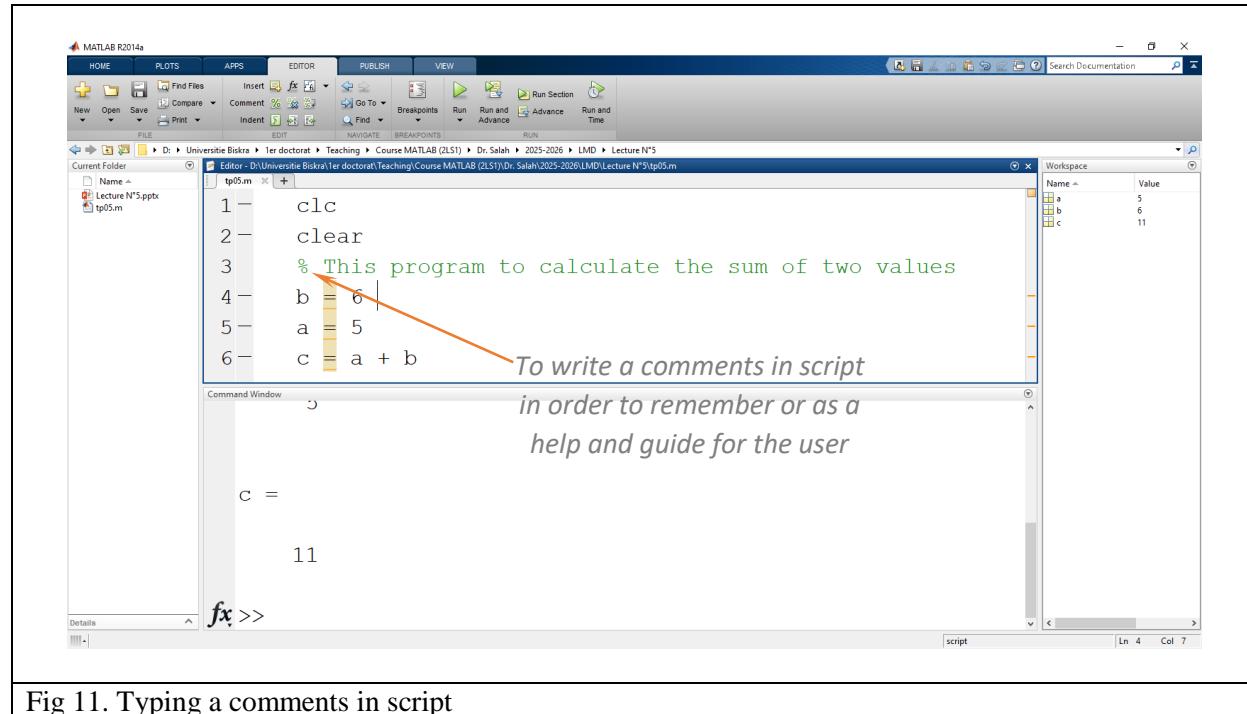



Fig 11. Typing a comments in script

```

1 - clc
2 - clear
3 - % This program to calculate the sum of two values
4 - b = 6
5 - a = 5
6 - c = a + b

```

*To write a comments in script
 in order to remember or as a
 help and guide for the user*

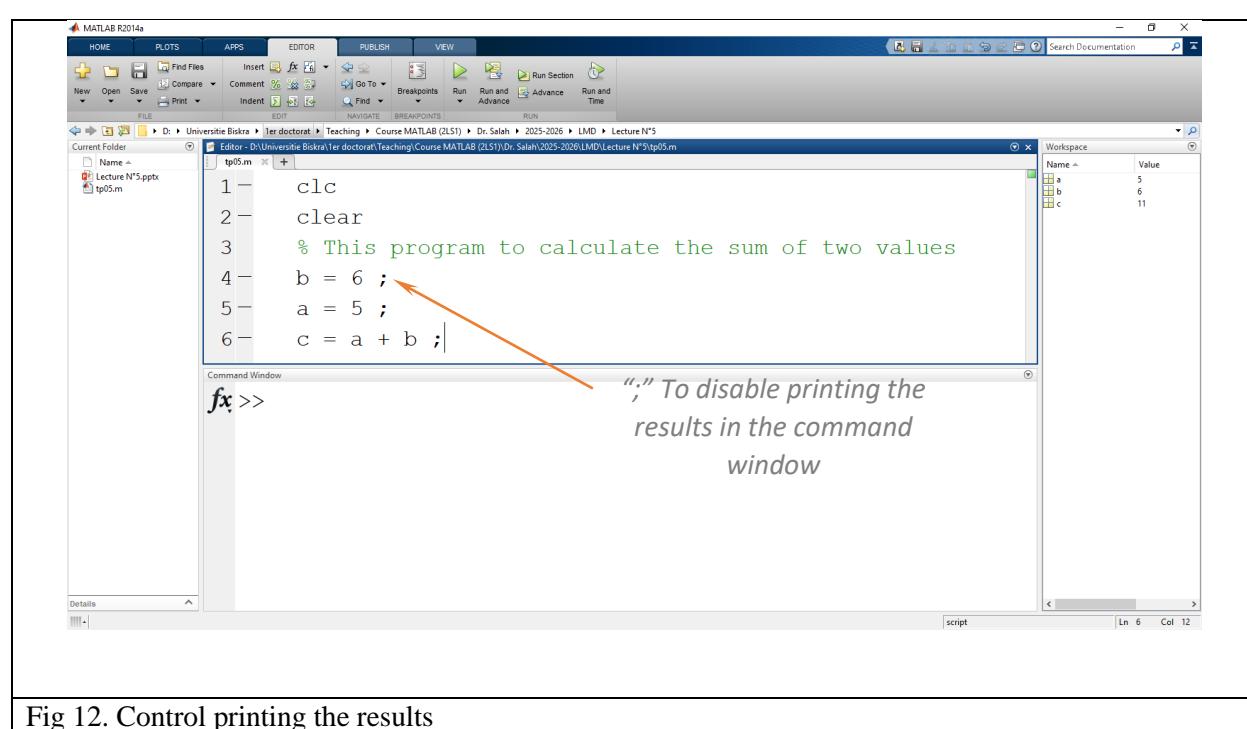


Fig 12. Control printing the results

```

1 - clc
2 - clear
3 - % This program to calculate the sum of two values
4 - b = 6 ;
5 - a = 5 ;
6 - c = a + b ;

```

*;" To disable printing the
 results in the command
 window*



```

1 clear
2 % This program to calculate the sum of two values
3 b = 6 ;
4 a = 5 ;
5 c = a + b ;
6 disp([a b c])

```

To be able printing the results in the same line and with the own order

Fig 13. Control printing multiple results

```

1 clear
2 % This program to calculate the sum of two values
3 b = 6 ;
4 a = 5 ;
5 c = a + b ;
6 disp('c is the sum of a and b')

```

Possibility of printing text

Fig 14. Printing text in script

3. List of References

Kattan, Peter Issa. *Matlab for Beginners: A gentle approach*. Petra books, 2008.



Etter, Delores M., David C. Kuncicky, and Douglas W. Hull. Introduction to MATLAB. Vol.4. Hoboken, NJ, USA: Prentice Hall, 2002.

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