

## M-FILES The M Files Creating and Running Script File

MATLAB provides a feature to store a sequence of statements in a file and execute these statements at the MATLAB prompt exactly as if have typed each command sequentially. Such files are called M-files or script files because they contain file extensions as '.m'. M-files are basically text files where we can place our MATLAB commands. These files can be created using any word processing function or any editor. If we have two m-files with the same name, then MATLAB will execute the statements from the file that appears first in the path order. M-files will be very productive and efficient as well as time-saving.

### Types of M-files :

- Script files
- Function Files

**Script files:** It is an external file comprising a sequence of MATLAB statements with the file extension '.m'. These files are also known as M-files. To execute the statements in the file, type the name of the m-file at the MATLAB prompt. The variables in a script file are global which allows modification in the value of variables of the same name in the environment of the current MATLAB session. M-files neither accept any input nor do they return any output rather they operate on data in the workspace.

**Function files:** Functions are subprograms in the main program that perform a specific task. Functions are M-files that accept input and return output. Make sure that the name of M-files and functions should be the same. Variables in a function file are local by default, but we can declare a variable global.

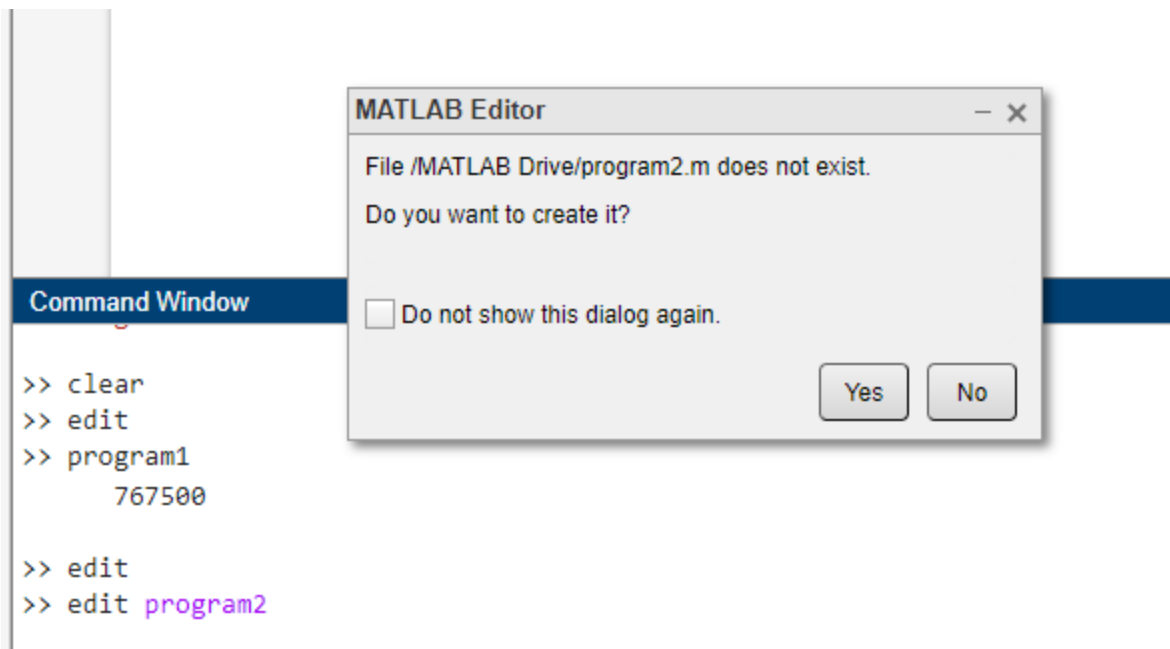
### **Methods to Create M-file:**

#### **Method 1: Creating M-file using MATLAB editor :**

- Choose **New** -> **Script**. This opens up a text editor.
- Type the commands and save the file with the extension 'program1.m' by selecting the **Save** option
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#### **Method 2: Creating M-file using Command Window:**

- Type the command **edit** or **edit file name** in the command window to open an editor. It will ask you to create a new file if it does not exist. Click Yes.



- It will open a M-file with the specified file name. Here it has created “program2.m”.
- Type the commands to be executed.

### Example:

**% MATLAB code to create**

**% M-file using Command Window**

**a = 20;**

**b=50;**

**c=100;**

**average=(a+b+c)/3;**

**disp(average);**

Run the M-file either by clicking on the Run button or typing the M-file name on the Command window.