Scripts and Functions

Talk to a Teacher
National Mission on Education through ICT

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Script & Narration

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Script Files

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- **When several commands are to be executed, it may be more convenient to write these statements into a file with Scilab editor.**
- **These are called as SCRIPT files.**

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- To execute the commands written in such a script file, the ”*exec*” function can be used, followed by the name of the script file.

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- **To execute the commands written in such a script file, the "*exec*" function can be used, followed by the name of the script file.**
- **These file generally have the extension "*.sce*" or "*.sci*", depending on its content.**

.sci Files

Files having the .sci extension contains

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- **Scilab functions and/or**
- **User defined functions**

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Executing these files loads the functions into Scilab environment (but does not execute them)

.sce Files

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- **Scilab functions and**
- **User defined functions**

Remember

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- **The convention of naming the extension as *.sce* and *.sci* are not RULES, but a convention followed by the scilab community.**

Features of Scilab Script Files

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- **You can define any number of functions in a single .sci file**

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  - **By default all the variables defined in a function are LOCAL**
  - **The scope of these variables used in a particular function ends with the endfunction keyword of the function definition.**

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- **We can use same variable names in different function.**
- **These variables won't get mixed up unless we use the global option.**
- **To know more about the global variables type** *help global*

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Features of Scilab Script Files

Please note that if any variable is to be "watched" or monitored inside a function, then *disp* is required.

Inside a function file, you can check for yourself the effect of putting a *semicolon*(;) at the end of a statement

Also check this for *disp*(" ... ") statements.

Inline Functions

- **Functions are segments of code that have well defined input and output as well as local variables**

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- **The simplest way to define a function is by using the command** *'deff()'*.

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- **Scilab allows the creation of in-line functions and are especially useful when the body of the function is short**
- **This can be done with the help of the function *deff*().**

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  - **The first string defines the interface to the function**
  - **The second string defines the statements of the function.**

Inline Functions

- **The deff command defines the function in the scilab and also loads it.**

Inline Functions

- **The deff command defines the function in the scilab and also loads it.**
- **There is no need to load the function defined by using deff command explicitly through execute menu option.**

.sce Files

The files with the .sce file extension are the script files

- **They contain the SCILAB commands that you enter during an interactive kind of SCILAB session**

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- **They contain the SCILAB commands that you enter during an interactive kind of SCILAB session**
- **They can comprise comment lines utilized in documenting the function**

.sce Files

- They can also use the command EXEC to execute the script.

.sci Files

- The files with the .sci file extension are the function files that start with the function statement.

.sce Files

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- **A single .sci file can have multiple function definitions which**
  - **Themselves contain any number of SCILAB statements that perform operations on the function arguments or**

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- **A single .sci file can have multiple function definitions which**
  - **Themselves contain any number of SCILAB statements that perform operations on the function arguments or**
  - **On the output variables after they have been evaluated.**

Acknowledgement

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