

User-defined Input & Output in Scilab

Talk to a Teacher

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://www.sakshat.ac.in>

Script & Narration

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Learning Objectives

In this tutorial we will learn,

- **Input Function**



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Learning Objectives

In this tutorial we will learn,

- ▶ **Input Function**
- ▶ **Formatting the Output**



Learning Objectives

In this tutorial we will learn,

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- ▶ **Save Function**



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- ▶ **Formatting the Output**
- ▶ **Save Function**
- ▶ **Load Function**



Software requirement

- OS: Ubuntu 12.04



Software requirement

- ▶ **OS: Ubuntu 12.04**
- ▶ **Scilab version: 5.3.3**



Prerequisite

- **Basic knowledge of Scilab**



Prerequisite

- ▶ Basic knowledge of Scilab
- ▶ If not, for relevant tutorials please visit <http://spoken-tutorial.org>



Input Function

- Used to take the input from the user



Input Function

- ▶ **Used to take the input from the user**
- ▶ **Provides a prompt in the text string for user input**



Input Function

- ▶ Used to take the input from the user
- ▶ Provides a prompt in the text string for user input
- ▶ **Waits for input from the keyboard**



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Input Function

- ▶ Used to take the input from the user
- ▶ Provides a prompt in the text string for user input
- ▶ Waits for input from the keyboard
- ▶ If nothing but a carriage return is entered at the prompt



Input Function

- ▶ Used to take the input from the user
- ▶ Provides a prompt in the text string for user input
- ▶ Waits for input from the keyboard
- ▶ If nothing but a carriage return is entered at the prompt
- ▶ **input()** function returns an empty matrix



Input Function

Input function can be written in 2 ways:

- ▶ `x=input("message to display")`



Input Function

Input function can be written in 2 ways:

- ▶ `x=input("message to display")`
- ▶ `x=input("message to display", "string")`



mprintf()

- **Converts, formats and writes data on to the Scilab console**



mprintf()

- ▶ **Converts, formats and writes data on to the Scilab console**
- ▶ **Interface for C-coded version of printf function**



save() & load()

To quit Scilab midway through a calculation



save() & load()

To quit Scilab midway through a calculation and continue at a later stage:



save() & load()

To quit Scilab midway through a calculation and continue at a later stage:

→ `save thissession`



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save() & load()

To quit Scilab midway through a calculation and continue at a later stage:

→ `save thissession`

- ▶ **will save the current values of all variables to the file `thissession`**



save() & load()

To quit Scilab midway through a calculation and continue at a later stage:

→ `save thissession`

- ▶ **will save the current values of all variables to the file `thissession`**
- ▶ **This file cannot be edited**



save() & load()

To quit Scilab midway through a calculation and continue at a later stage:

→ `save thissession`

- ▶ will save the current values of all variables to the file `thissession`
- ▶ This file cannot be edited
- ▶ It is in binary format



save() & load()

- ▶ When you next start Scilab, type
→ `load thissession`



save() & load()

- ▶ **When you next start Scilab, type**
→ `load thissession`
- ▶ **The computation can be resumed where you left off**



save()

- Saves the current Scilab variables in a binary file



save()

- ▶ Saves the current Scilab variables in a binary file
- ▶ If the variable is a graphic handle



save()

- ▶ Saves the current Scilab variables in a binary file
- ▶ If the variable is a graphic handle
- ▶ it saves all the corresponding graphics_entities definition



save()

The file can be given either by its

- ▶ **paths or**



save()

The file can be given either by its

- ▶ paths or
- ▶ **descriptor previously given**



save()

- ▶ `save(filename)`



save()

- ▶ `save(filename)`
**saves all current variables in the
file defined by filename**



save()

- ▶ `save(filename)`
saves all current variables in the file defined by filename
- ▶ `save(fd)`



save()

- ▶ `save(filename)`
saves all current variables in the file defined by filename
- ▶ `save(fd)`
saves all current variables in the file defined by the descriptor fd



save()

- ▶ `save(filename,x,y)` **or**
`save(fd,x,y)`



save()

- ▶ `save(filename,x,y)` **or**
`save(fd,x,y)`



save()

- ▶ `save(filename,x,y)` **or**
`save(fd,x,y)`
saves only named variables x and y



Summary

In this tutorial we learnt,

- ▶ Input Function using **input** command



Summary

In this tutorial we learnt,

- ▶ Input Function using **input** command
- ▶ Formatting the Output using **mprintf** command



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Summary

In this tutorial we learnt,

- ▶ Input Function using **input** command
- ▶ Formatting the Output using **mprintf** command
- ▶ **Save Function**



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Summary

In this tutorial we learnt,

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- ▶ Formatting the Output using **mprintf** command
- ▶ **Save** Function
- ▶ **Load** Function



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- ▶ Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
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The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



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- ▶ More information on this Mission is available at

<http://spoken-tutorial.org/NMEICT-Intro>

