

# 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**



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# Learning Objectives

In this tutorial we will learn,

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



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# Learning Objectives

In this tutorial we will learn,

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



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# Software requirement

- ▶ OS: Ubuntu 12.04



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# Software requirement

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



# Prerequisite

- ▶ **Basic knowledge of Scilab**



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# 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



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# Input Function

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



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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**



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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")`



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# Input Function

Input function can be written in 2 ways:

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



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# mprintf()

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



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# mprintf()

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



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# save() & load()

## To quit Scilab midway through a calculation



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# save() & load()

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



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# 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



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# save() & load()

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



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# 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



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# save()

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



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# 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



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# save()

The file can be given either by its

- ▶ **paths or**



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# save()

The file can be given either by its

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



# save()

- ▶ `save(filename)`



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# save()

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



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# save()

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



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# 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**



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# save()

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



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# save()

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



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# save()

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



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# Summary

In this tutorial we learnt,

- ▶ **Input Function using `input` command**



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# 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,

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- ▶ **Save Function**



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# Summary

In this tutorial we learnt,

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



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# About the Spoken Tutorial Project

- ▶ Watch the video available at [http://spoken-tutorial.org/What\\_is\\_a\\_Spoken\\_Tutorial](http://spoken-tutorial.org/What_is_a_Spoken_Tutorial)
- ▶ It summarises the Spoken Tutorial project



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- ▶ It summarises the Spoken Tutorial project
- ▶ If you do not have good bandwidth, you can download and watch it



# Spoken Tutorial Workshops

## 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](mailto:contact@spoken-tutorial.org)



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- ▶ **It is supported by the National Mission on Education through ICT, MHRD, Government of India**
- ▶ **More information on this Mission is available at**

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

