

File Handling 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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30 January 2013



Learning Objectives

- ▶ **File Handling with the following functions:**



Learning Objectives

- ▶ **File Handling with the following functions:**
 - ▶ **Write Function**



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- ▶ **File Handling with the following functions:**
 - ▶ **Write Function**
 - ▶ **Read Function**



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Learning Objectives

- ▶ **File Handling with the following functions:**
 - ▶ **Write Function**
 - ▶ **Read Function**
 - ▶ **mopen**



Learning Objectives

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 - ▶ **mopen**
 - ▶ **mclose**



Software requirement

- OS: Ubuntu 12.04



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- ▶ **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>**



File Handling

Involves-



File Handling

Involves-

- ▶ Writing to a file using `write()`



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File Handling

Involves-

- ▶ **Writing to a file using** `write()`
- ▶ **Reading from a file using** `read()`



File Handling

Involves-

- ▶ Writing to a file using `write()`
- ▶ Reading from a file using `read()`
- ▶ Opening an existing file using `mopen()`



File Handling

Involves-

- ▶ **Writing to a file using** `write()`
- ▶ **Reading from a file using** `read()`
- ▶ **Opening an existing file using** `mopen()`
- ▶ **Closing an already opened file using** `mclose()`



mopen

```
fd = mopen(file-name, mode)
```

- **Used to open a existing file**



mopen

```
fd = mopen(file-name, mode)
```

- ▶ **Used to open a existing file**
- ▶ **in a way compatible to C fopen procedure**



mopen

```
fd = mopen(file-name, mode)
```

- ▶ **Used to open a existing file**
- ▶ **in a way compatible to C fopen procedure**
- ▶ **mode is a character string**



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mopen

```
fd = mopen(file-name, mode)
```

- ▶ **Used to open a existing file**
- ▶ **in a way compatible to C fopen procedure**
- ▶ **mode is a character string**
- ▶ **controls whether the file is opened for**



mopen: mode

- ▶ **r = Opens the file for reading**



mopen: mode

- ▶ **r = Opens the file for reading**
- ▶ **rb = Opens a binary file for reading**



mopen: mode

- ▶ **r = Opens the file for reading**
- ▶ **rb = Opens a binary file for reading**
- ▶ **rt = Opens a text file for reading**



mopen: mode

- ▶ **r** = Opens the file for reading
- ▶ **rb** = Opens a binary file for reading
- ▶ **rt** = Opens a text file for reading
- ▶ **w** = Creates a new file for writing, or



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mopen: mode

- ▶ **r** = Opens the file for reading
- ▶ **rb** = Opens a binary file for reading
- ▶ **rt** = Opens a text file for reading
- ▶ **w** = Creates a new file for writing, or opens and truncates a file to zero length



mopen: mode

- ▶ **wb** = Creates a new binary file for writing, or



mopen: mode

- ▶ **wb = Creates a new binary file for writing, or opens and truncates a file to zero length**



mopen: mode

- ▶ **wb** = Creates a new binary file for writing, or opens and truncates a file to zero length
- ▶ **wt** = Creates a text binary file for writing, or



mopen: mode

- ▶ **wb = Creates a new binary file for writing, or opens and truncates a file to zero length**
- ▶ **wt = Creates a text binary file for writing, or opens and truncates a file to zero length**



mopen: mode

- ▶ **a or ab = Appends** (opens a file for writing at the end of the file, or



mopen: mode

- ▶ **a or ab = Appends** (opens a file for writing at the end of the file, or creates a file for writing)



mopen: mode

- ▶ **a or ab = Appends** (opens a file for writing at the end of the file, or creates a file for writing)
- ▶ **r+ or r+b = Opens a file for update** (reading and writing)



mopen: Example

```
fd_r = mopen('random-numbers','rt')
```



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mopen: Example

```
fd_r = mopen('random-numbers', 'rt')
```

**opens the 'random-numbers' as text
and read-only mode**



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fclose

`fclose(fd)`

- closes the opened file by using `fclose`



fclose

`fclose(fd)`

- ▶ closes the opened file by using `fclose`
- ▶ where `fd` is the file descriptor of the opened file



fclose

`fclose(fd)`

- ▶ closes the opened file by using `fclose`
- ▶ where `fd` is the file descriptor of the opened file
- ▶ If `fd` is omitted `fclose` closes the last opened file



Summary

- **File Handling with the following functions:**



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About the Spoken Tutorial Project



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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



Acknowledgements

- ▶ **Spoken Tutorial Project is a part of the Talk to a Teacher project**
- ▶ **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>

