

# Accessing SBHS through Scilab on Windows

**Talk to a Teacher**

**<http://spoken-tutorial.org>**

**National Mission on Education through ICT**

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

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# Objectives

**We will learn**

- ▶ **To set up serial communication between Scilab and SBHS**



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**We will learn**

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- ▶ **To perform Step Test experiment**



# System Requirements

**For this tutorial, I am using**

- ▶ **Windows-7 OS**



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- ▶ **Scilab 5.3.3**



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- ▶ You may download Scilab from:  
[www.scilab.org](http://www.scilab.org)



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- ▶ You may download Scilab from:  
**[www.scilab.org](http://www.scilab.org)**
- ▶ To install Scilab, watch the Scilab spoken tutorial series on  
**<http://spoken-tutorial.org>**



# Prerequisites

**Watch the following tutorials**

- 1. Introduction to Xcos**
- 2. Connecting SBHS to computer**

**The relevant tutorials for these, are available in this series, on**

**<http://spoken-tutorial.org>**





# COM Port identification

1. For RS232 the port number will be COM1
2. For USB it will be greater than COM1 i.e. COM2, COM3... etc
3. Note down the appropriate COM number



# COM Port setting

1. A two digit COM port number cannot be used
2. This is because scilab serial toolbox works only with single digit COM port number
3. Change the COM port number if it is two digit



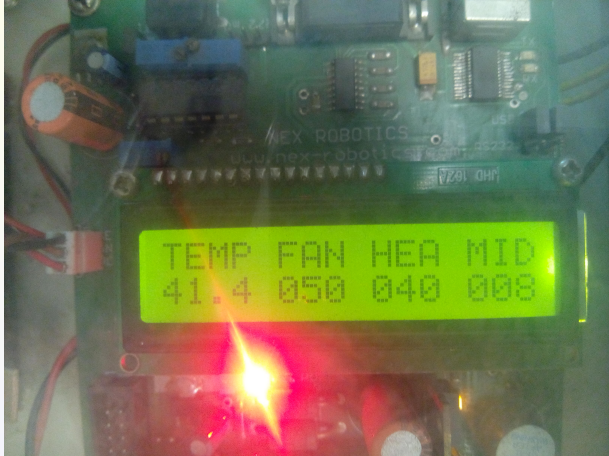
# TCL/TK Error

In case a TCL/TK related error is displayed,

1. Reconnect the USB cable connected to the SBHS and execute the file again.
2. Check once if the COM port number has changed.
3. If it still doesn't work, restart Scilab and repeat the process.



# SBHS Display



# Notes

1. **Values of Fan, Heater and Temperature should be same as shown on the SBHS display**



# Notes

1. Values of Fan, Heater and Temperature should be same as shown on the SBHS display
2. If not then Scilab is not communicating with SBHS



# SBHS LED<sub>s</sub>



1. Recommended only after firm understanding of the process is gained.



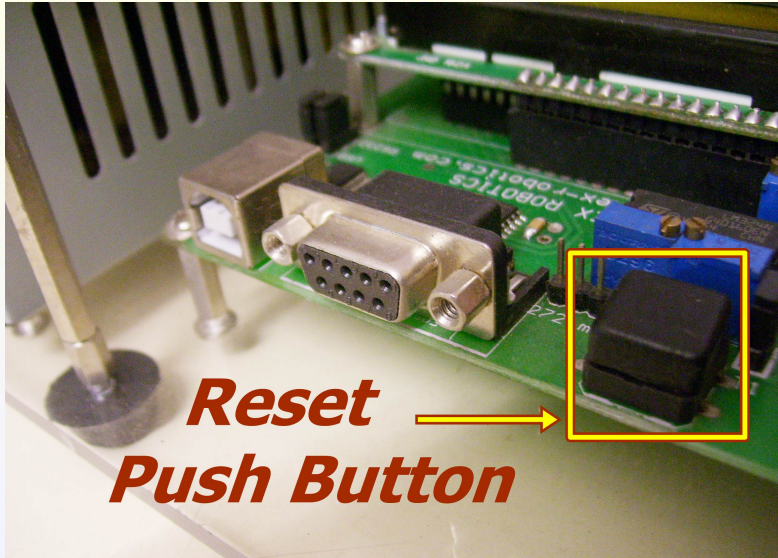


# Start.sce

1. Recommended only after firm understanding of the process is gained.
2. Port number provided in `ser_init.sce` file must be correct.



# Resetting SBHS



# Summary

**In this tutorial, we have learnt how to,**

- ▶ **Set up serial communication between Scilab and SBHS**
- ▶ **Perform Step Test experiment**



# 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
- ▶ 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, write to

**[contact@spoken-tutorial.org](mailto: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>

