

# User-defined Variables in Xcos

**Spoken Tutorial Project**

<https://spoken-tutorial.org>

**National Mission on Education through ICT**

<http://sakshat.ac.in>

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**Video: Iswariya Sasikumar**

**FOSSEE TEAM**

**23 April 2021**



# Learning Objectives

**In this tutorial, we will learn how to**



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**In this tutorial, we will learn how to**

- ▶ **Pass variables from Scilab console to Xcos**



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# System Requirements

**To record this tutorial, I am using**



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**To record this tutorial, I am using**

- ▶ **Windows 10 OS**



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- ▶ **Scilab 6.1.0**



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**The process demonstrated in this tutorial is identical in Linux OS also**



# Pre-requisites

**Before practising this tutorial, a learner should have :**



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- ▶ **Basic knowledge of Scilab and Xcos**



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**If not, then go through the Scilab spoken tutorials on this website**

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



# Variables

**There are 2 ways to define variables in Xcos:**



# Variables

**There are 2 ways to define variables in Xcos:**

- ▶ **Defining variables from the Scilab Console**



# Variables

**There are 2 ways to define variables in Xcos:**

- ▶ **Defining variables from the Scilab Console**
- ▶ **Defining variables from context menu**





# Simulation - Blocks used

**For this we used the below blocks**

► **RAMP**



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- ▶ **RAMP**
- ▶ **CLOCK\_c**



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**For this we used the below blocks**

- ▶ **RAMP**
- ▶ **CLOCK\_c**
- ▶ **CSCOPE**



# Advantages of Context menu



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- ▶ Using the set context menu, we can include the variables in the simulation itself



# Advantages of Context menu

- ▶ **Using the set context menu, we can include the variables in the simulation itself**
- ▶ **We need not carry an additional sci file just to initialize the variable**



# Summary

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

- ▶ **Pass variables from Scilab console to Xcos**
- ▶ **Pass variables from context menu to Xcos**



# Assignment

**As an assignment, please do the following:**

- ▶ **Change the value of variable a to 5 using the Console window and context menu**
- ▶ **Check the output in the graphic window**





# About Spoken Tutorial project

- ▶ Watch the video available at [https://spoken-tutorial.org/What\\_is\\_a\\_Spoken\\_Tutorial](https://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, please write to [contact@spoken-tutorial.org](mailto:contact@spoken-tutorial.org)



# Answers for THIS Spoken Tutorial

- ▶ **Questions in THIS Spoken Tutorial?**
- ▶ **Visit <https://forums.spoken-tutorial.org/>**
- ▶ **Choose the minute and second where you have the question**
- ▶ **Explain your question briefly**
- ▶ **The Spoken Tutorial project will ensure an answer**



- For any general or technical questions on Scilab, visit the FOSSEE forum and post your question

<https://forums.fossee.in/>

# Textbook Companion project

- ▶ The FOSSEE team coordinates the Textbook Companion project
- ▶ We give Certificates and Honorarium to the contributors
- ▶ For more details, please visit:  
[https://scilab.in/Textbook\\_Companion\\_Project](https://scilab.in/Textbook_Companion_Project)



# Lab Migration

- ▶ The FOSSEE team coordinates the Lab Migration project
- ▶ For more details, please visit:  
[https://scilab.in/  
Lab\\_Migration\\_Project](https://scilab.in/Lab_Migration_Project)



# Acknowledgements

- ▶ **The Spoken Tutorial project is funded by MoE, Government of India**



# Thank you

- ▶ **This is Iswariya Sasikumar, a FOSSEE intern 2021, IIT Bombay signing off**
- ▶ **Thanks for joining**

