

# Building GUI to graph a Linear Equation

**Spoken Tutorial Project**

<https://spoken-tutorial.org>

**National Mission on Education through ICT**

<http://sakshat.ac.in>

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**FOSSEE Team**

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# Learning Objectives

**In this tutorial, we will learn:**



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In this tutorial, we will learn:

- **About the Axes.**



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In this tutorial, we will learn:

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- How to plot the linear equation of a line using GUI.



# System Requirements

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**The process demonstrated in this tutorial is similar in Linux OS.**



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**To follow this tutorial:**



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- **The learner must have basic knowledge of Scilab and GUI Builder toolbox.**



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- The learner must have basic knowledge of Scilab and GUI Builder toolbox.
- For pre-requisite Scilab tutorials please visit <https://spoken-tutorial.org>



# Code Files

- The files used in this tutorial are provided in the Code files link.



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- **Make a copy and then use them while practising.**



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  - $c = C/B$



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- **It displays graphs and images.**



# Objects for graphing Linear equation

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# Objects for graphing Linear equation

- Three Edit boxes for A, B and C.
- Two Text boxes to display slope and y-intercept.
- One Pushbutton to calculate and plot.
- One Axes for displaying the graph.



# Summary

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

- **About the Axes.**
- **How to plot a linear equation of a line using GUI.**



# Assignment

**Create a GUI to,**

- **Plot an equation of  $y = e^{Ax}$ .**
- **Take 'A' as input from the user.**
- **Consider, x varies from 0 to  $2\pi$ .**



# 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.
- You will have to register to ask questions.



- 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:  
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Lab\\_Migration\\_Project](https://scilab.in/Lab_Migration_Project)



# Acknowledgements

- **The Spoken Tutorial project is funded by the Ministry of Education, Government of India.**



# Thank you

- This is Amandeepsingh Siddhu, a FOSSEE intern 2021, IIT Bombay signing off.
- Thanks for joining.

