

# Multiple Plots

**Spoken Tutorial Project**

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

**National Mission on Education through ICT**

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

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# Objectives

In this tutorial, we will learn -



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- ▶ Draw multiple plots which are overlaid



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- ▶ Use the figure command



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- ▶ Use the figure command
- ▶ Use the legend command



# Objectives

- ▶ **Switch between the plots and perform some operations on each of them like saving the plots.**



# System Specifications

- ▶ **Ubuntu Linux 14.04**



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- ▶ **IPython 5.1.0**



# Pre-requisites

To practise this tutorial, you should know how to

- ▶ use Plots interactively.
- ▶ Embellish a plot.
- ▶ Save plots.

If not, see the pre-requisite Python tutorials on <http://spoken-tutorial.org>



# Exercise 1

**Draw two plots for the given form**

- 1. First plot is a parabola of the form**  
$$y = 4x^2$$



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- 2. Second plot is a straight line of the form  $y = 2x + 3$  in the interval -5 to 5.**



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- 1. First plot is a parabola of the form  $y = 4x^2$**
- 2. Second plot is a straight line of the form  $y = 2x + 3$  in the interval -5 to 5.**
- 3. Use legends to indicate each plot.**



# Exercise 2

- ▶ **Draw a line of the form  $y = x$  as one figure and another line of the form  $y = 2x + 3$ .**



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- ▶ **Draw a line of the form  $y = x$  as one figure and another line of the form  $y = 2x + 3$ .**
- ▶ **Save each of them.**



# Summary

In this tutorial, we have learnt to -

- ▶ Draw multiple plots which are overlaid.
- ▶ Use the figure command.
- ▶ Use the legend command.



# Summary

- ▶ **Switch between the plots and perform some operations on each of them like saving the plots.**



# Evaluation

1. What command is used to get individual plots separately?
2. What will be the command to identify sine and cosine curve?



# Solutions

1. `figure()`
2. `legend(['sin(x)', 'cos(x)'])`



# Forum to answer questions

- ▶ Do you have questions on **THIS Spoken Tutorial?**
- ▶ Choose the minute and second where you have the question.
- ▶ Explain your question briefly.
- ▶ Someone from the **FOSSEE** team will answer them. Please visit

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



# Forum to answer questions

- ▶ Questions not related to the Spoken Tutorial?
- ▶ Do you have general / technical questions on the Software?
- ▶ Please visit the FOSSEE Forum  
<http://forums.fossee.in/>
- ▶ Choose the Software and post your question.



# Textbook Companion Project

- ▶ **The FOSSEE team coordinates coding of solved examples of popular books**
- ▶ **We give honorarium and certificate to those who do this**

**For more details, please visit this site:**

<http://tbc-python.fossee.in/>



# 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>



# THANK YOU!

For more Information, visit our website  
<http://fossee.in/>

