

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.**



Exercise 1

Draw two plots for the given form

- 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/>



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- ▶ 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/>

