

Saving Plots

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Objectives

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- ▶ **Save plots in different formats.**



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 Plot Command Interactively

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



Creating a basic plot

Let us plot a sine wave from -3π to 3π .



savefig()

- ▶ **savefig()** - to save plots



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syntax: **savefig(fname)**



savefig()

- ▶ **savefig()** - to save plots
syntax: **savefig(fname)**
- ▶ **savefig** function takes one argument which is the filename.



Path for Windows system

- ▶ **Example -**
C:/Users/fossee/Desktop/sine.png



More on savefig()

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- ▶ **.eps - Encapsulated Post Script**



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- to be used with **L^AT_EX** documents



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- ▶ **.svg** - Scalable Vector Graphics



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to be used with **L^AT_EX** documents
- ▶ **.svg** - Scalable Vector Graphics
- ▶ **.png** - Portable Network Graphics



Exercise 1

Save the sine plot in the eps format



Exercise 2

Save the sine plot in PDF, PS and SVG formats.



Summary

In this tutorial, we have learnt to -

- ▶ Save plots using the `savefig()` function.
- ▶ Save the plots in different formats.
 - ▶ pdf
 - ▶ ps
 - ▶ png
 - ▶ svg
 - ▶ eps



Assignment

1. Which command is used to save a plot.

- ▶ `saveplot()`
- ▶ `savefig()`
- ▶ `savefigure()`
- ▶ `saveplt()`



Assignment

2. `savefig('sine.png')` saves the plot in,

- ▶ The root directory “/” (on GNU/Linux, Unix based systems), “C:” (on windows).
- ▶ Will result in an error as full path is not supplied.
- ▶ The current working directory.
- ▶ Predefined directory like “/documents”.



Solutions

1. `savefig()`
2. The current working directory



Forum to answer questions

- ▶ **Do you have questions in 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/>**

