

Saving Plots

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Objectives

At the end of this tutorial, you will be able to -



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- ▶ **Save plots using `savefig()` function.**



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At the end of this tutorial, you will be able to -

- ▶ **Save plots using `savefig()` function.**
- ▶ **Save plots in different formats.**



System Specifications



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- ▶ **Ubuntu Linux 14.04**



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- ▶ **Python 2.7.6**



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- ▶ **Python 2.7.6**
- ▶ **IPython 4.0.0**



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.



More on savefig()

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- ▶ **.pdf - PDF(Portable Document Format)**
- ▶ **.ps - PS(Post Script)**



More on savefig()

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- ▶ **.pdf** - PDF(Portable Document Format)
- ▶ **.ps** - PS(Post Script)
- ▶ **.eps** - Encapsulated Post Script

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



More on savefig()

savefig can save the plot in many formats, such as

- ▶ **.pdf** - PDF(Portable Document Format)
- ▶ **.ps** - PS(Post Script)
- ▶ **.eps** - Encapsulated Post Script
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.



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In this tutorial, we have learnt to -



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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.



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- ▶ `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).



Assignment

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- ▶ Will result in an error as full path is not supplied.



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.



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/>



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- ▶ **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/>

