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

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





### System Specifications

▶ Ubuntu Linux 14.04





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- Python 3.4.3





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- Python 3.4.3
- ▶ 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 <a href="http://spoken-tutorial.org">http://spoken-tutorial.org</a>





#### Creating a basic plot

Let us plot a sine wave from -3\*pi to 3\*pi.





# savefig()

savefig() - to save plots





# savefig()

savefig() - to save plots 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









savefig can save the plot in many formats, such as

.pdf - PDF(Portable Document Format)





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





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- .ps PS(Post Script)
- .eps Encapsulated Post Script





- .pdf PDF(Portable Document Format)
- .ps PS(Post Script)
- ▶ .eps Encapsulated Post Script to be used with LATEX documents





- .pdf PDF(Portable Document Format)
- .ps PS(Post Script)
- .eps Encapsulated Post Script to be used with LATEX documents
- .svg Scalable Vector Graphics





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- .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





### Forum to answer questions

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- 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/



