

L^AT_EX and gnuplot

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives



Learning Objectives

- ▶ Learn the pause command to suspend script file execution



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- ▶ Add \LaTeX symbols in axis labels



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- ▶ Export the output to a \LaTeX file



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- ▶ Add \LaTeX symbols in axis labels
- ▶ Export the output to a \LaTeX file
- ▶ Open the \LaTeX compiler file, compile it & generate a pdf file



Learning Objectives

- ▶ Learn the pause command to suspend script file execution
- ▶ Add \LaTeX symbols in axis labels
- ▶ Export the output to a \LaTeX file
- ▶ Open the \LaTeX compiler file, compile it & generate a pdf file
- ▶ Crop the pdf file using pdfcrop



System Requirements



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► **Ubuntu Linux v 16.04 OS**



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- ▶ `gnuplot v 5.2.6`



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- ▶ **TeXworks v 0.6.3**
- ▶ `pdftcrop v 1.38`



System Requirements



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- ▶ Windows users need **Miktex** and **ActivePerl 5.28** to use pdfcrop



Pre-requisites



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- ▶ Learner must be familiar with the basics of gnuplot and \LaTeX



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- ▶ Learner must be familiar with the basics of `gnuplot` and \LaTeX
- ▶ For pre-requisite tutorials please visit this site

<https://spoken-tutorial.org>



Code Files



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- ▶ The input files used in this tutorial are provided in the **Code files** link



Code Files

- ▶ **The input files used in this tutorial are provided in the Code files link**
- ▶ **Please download and extract the files**



Download Link

- ▶ Download link for Texworks is,
<https://www.tug.org/texworks/>
- ▶ Active Perl download site is
<https://www.activestate.com/products/perl/downloads/>
- ▶ Miktex can downloaded from
<https://miktex.org/download>



Summary



Summary

- ▶ Learned the pause command
- ▶ Generated a \LaTeX output file
- ▶ Compiled the \LaTeX file to generate a pdf file of the graph
- ▶ Cropped the output pdf file using pdfcrop



Assignment 1



Assignment 1

- ▶ Read the documentation on pause command from the help section
- ▶ Suspend the script with
 - ▶ Time delay of 10 seconds
 - ▶ With a mouse click



Assignment 2

- ▶ Use data file **assignment.txt**, to generate a graph
- ▶ You may also use your own choice of dataset



Assignment 2

- ▶ **Generate a \LaTeX output for a gnuplot graph**
- ▶ **Compile the file in \LaTeX and generate a pdf file output**



About the Spoken Tutorial Project

- ▶ Watch the video available at https://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ It summarises the Spoken Tutorial project
- ▶ If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



Forum questions

- ▶ Questions in **THIS Spoken Tutorial?**
- ▶ Visit <https://forums.spoken-tutorial.org>
- ▶ Choose the minute and second where you have the question
- ▶ Explain your question briefly
- ▶ The Spoken Tutorial project will ensure an answer

You will have to register to ask questions



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