

# Plotting Dataset from a File

**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

- ▶ **Plot XY graph from a dataset in a file**



# Learning Objectives

- ▶ **Plot XY graph from a dataset in a file**
- ▶ **Write the legend title**



# Learning Objectives

- ▶ **Plot XY graph from a dataset in a file**
- ▶ **Write the legend title**
- ▶ **Set symbol style and size**



# Learning Objectives

- ▶ Plot XY graph from a dataset in a file
- ▶ Write the legend title
- ▶ Set symbol style and size
- ▶ Add two datasets in the plot



# Learning Objectives

- ▶ Plot XY graph from a dataset in a file
- ▶ Write the legend title
- ▶ Set symbol style and size
- ▶ Add two datasets in the plot
- ▶ Change axis format to log scale



# Learning Objectives



# Learning Objectives

- **Change the line color**



# Learning Objectives

- ▶ **Change the line color**
- ▶ **Format the label style to scientific notation**



# Learning Objectives

- ▶ **Change the line color**
- ▶ **Format the label style to scientific notation**
- ▶ **Format the border line**



# Learning Objectives

- ▶ **Change the line color**
- ▶ **Format the label style to scientific notation**
- ▶ **Format the border line**
- ▶ **Add time stamp**



# System Requirements



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## ► Debian Linux 9.3



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- ▶ **Debian Linux 9.3**
- ▶ `gnuplot 5.2.6`



# System Requirements

- ▶ **Debian Linux 9.3**
- ▶ gnuplot 5.2.6
- ▶ **Gedit 3.22.0**



# Pre-requisites



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- ▶ **Learner must be familiar with, high school Mathematics**



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- ▶ **Learner must be familiar with, high school Mathematics**
- ▶ **For pre-requisite gnuplot tutorials, please visit this site**  
<https://spoken-tutorial.org>



# Summary



# Summary

- ▶ **Plotted data from a file**
- ▶ **Wrote the legend title**
- ▶ **Changed the symbol style and size**
- ▶ **Added two datasets in the plot**
- ▶ **Formatted the axis type**
- ▶ **Changed the line color**



# Summary



# Summary

- ▶ Formatted the label style to scientific notation
- ▶ Changed the border line color
- ▶ Learned to set time stamp



# Assignment



# Assignment

- ▶ Type **test** in `gnuplot` prompt to see terminal capability
- ▶ From the graphics window, choose different line style, symbol style and color
- ▶ Plot the graph with chosen styles using the **data.txt** file



# Assignment



# Assignment

- ▶ Introduce a line break in the data file between 4<sup>th</sup> and 5<sup>th</sup> line
- ▶ This will give an empty row in data file
- ▶ Save the file



# Assignment



# Assignment

- ▶ **Plot the data with linespoints style**
- ▶ **Observe the line break in the plot at the empty row**



# About the Spoken Tutorial Project

- ▶ Watch the video available at [https://spoken-tutorial.org/What\\_is\\_a\\_Spoken\\_Tutorial](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](mailto:contact@spoken-tutorial.org)



# Forum for Specific Questions

- ▶ Do you have questions in **THIS Spoken Tutorial?**
- ▶ Please visit <https://forums.spoken-tutorial.org>
- ▶ Choose the minute and second where you have the question
- ▶ Explain your question briefly
- ▶ Someone from our team will answer them



# 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**

**<https://spoken-tutorial.org/NMEICT-Intro>**

