

Run gnuplot from Perl Script

Spoken Tutorial Project

<https://www.spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

Rani Parvathy

IIT Bombay

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Learning Objectives



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- ▶ **Statistical summary from gnuplot for datasets using Perl script**



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- ▶ **Statistical summary from gnuplot for datasets using Perl script**
- ▶ **Files containing only outliers for labeling box plot**



Learning Objectives

- ▶ **Statistical summary from `gnuplot` for datasets using Perl script**
- ▶ **Files containing only outliers for labeling box plot**
- ▶ **A `gnuplot` graph, with multiple box plots with labeled outliers**



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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- ▶ **Perl v 5.22**
- ▶ **Gedit v 3.18**



Pre-requisites



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- ▶ **Learner must be familiar with the basics of `gnuplot` and `Perl`**



Pre-requisites

- ▶ **Learner must be familiar with the basics of gnuplot and Perl**
- ▶ **For pre-requisite gnuplot and Perl tutorials, please visit this site**
<https://spoken-tutorial.org>



Code Files



Code Files

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



Code Files

- ▶ The files used in this tutorial are provided in the [Code files](#) link
- ▶ Please download and extract the files



Code Files

- ▶ The files used in this tutorial are provided in the [Code files](#) link
- ▶ Please download and extract the files
- ▶ Make a copy and use them while practising



Download Link



Download Link

- ▶ Link to download Perl is,



Download Link

- ▶ Link to download Perl is,
- ▶ <https://www.perl.org/get.html>



Line Number in Statistical Summary File



Line Number in Statistical Summary File

If you are using gnuplot 5.2.3,

- ▶ **The values are generated in line numbers 19 and 21**



Other Programming Languages



Other Programming Languages

- ▶ **You may use C, Java, Python or another language of your choice**
- ▶ **If so, write the program accordingly**
- ▶ **You may also use your dataset of your choice**



Summary



Summary

- ▶ **Statistical summary from `gnuplot` using Perl script**
- ▶ **Datafiles containing only outlier data points in box plot**
- ▶ **Plotted multiple box plots in a graphical window**



Summary



Summary

- ▶ Specified the position of each box plot on x-axis
- ▶ Labeled the outliers in the box plot



Assignment



Assignment

- ▶ Three files are tiprovided in the **Codes files** link for assignment
- ▶ Using the files generate box plots and label the outliers in the graph

Hint: Modify the script to incorporate the correct file names



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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