

The Spoken Tutorial Project

- Self-explanatory: uses simple language
- Audio-video: uses multisensory approach
- Small duration: has better retention
- Learner-centered: learn at your own pace
- Learning by doing: learn and practise simultaneously
- Empowerment: learn a new **FLOSS** (Free/Libre and Open Source Software)

Target Audience

- College students, Researchers, Teachers
- Anyone who wants to make graphs

Workshops

The Spoken Tutorial Project Team conducts workshops on gnuplot and other FLOSS using spoken tutorials and gives certificates to those who pass an online test.

For more details, please visit <https://spoken-tutorial.org>

Forum

We have developed a beginner friendly Forum to answer specific questions pertaining to any part of a particular tutorial.

For more details, please visit <https://forums.spoken-tutorial.org>.

The Spoken Tutorial Project is funded by the National Mission on Education through Information and Communication Technology, Ministry of Human Resource Development, Government of India.

Contact us

Email: contact@spoken-tutorial.org
Website: <https://spoken-tutorial.org>

Forum help available to all learners

Content available in 22 Indian languages



IIT Bombay

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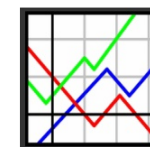


Spoken Tutorial

<https://spoken-tutorial.org>



Scan the QR code to visit Spoken Tutorial website



gnuplot

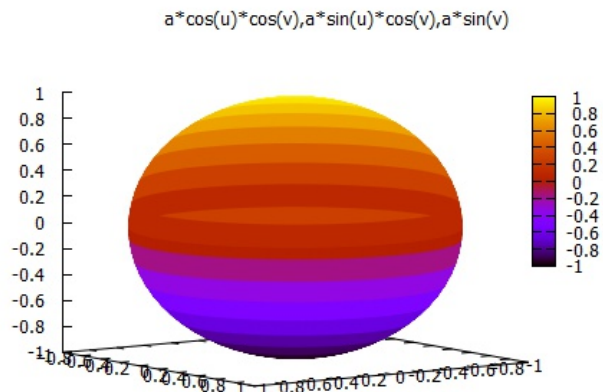
National Mission on Education through Information and Communication Technology (NMEICT)

www.sakshat.ac.in

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Introduction

- gnuplot is a command-line tool to generate graphical plots.
- It is a cross-platform software and available for Windows, Linux, Unix and Mac operating systems. Windows version of gnuplot has an additional menu based version.
- The gnuplot source code is available for free, even though copyrighted.
- Extensive user forum is available and the program is actively developed at the time of writing this brochure, at [https:// sourceforge.net/p/gnuplot/discussion](https://sourceforge.net/p/gnuplot/discussion)
- Several softwares use gnuplot for their plotting needs.



Heatmap

Download and Installation

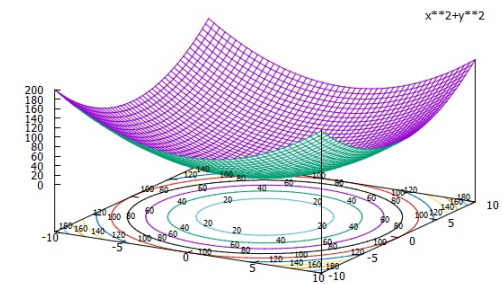
- The current and previous releases can be downloaded from the site, <https://sourceforge.net/projects/gnuplot/files/gnuplot/>
- Installation procedure and demonstration files can be downloaded from this web page along with the installable files
- If any special libraries are required, they can be downloaded from the web
- gnuplot can be run from python, Perl, C, Java, R or other programs to generate the desired graphs

Important features of gnuplot

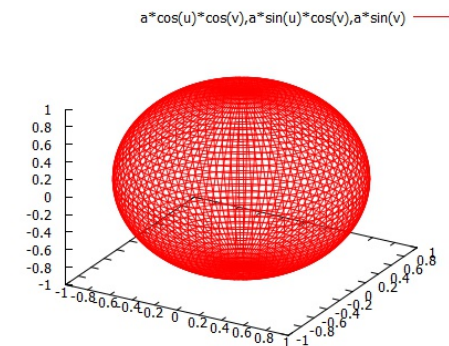
- Can draw 2D plots, 3D plots, surfaces and change perspective
- Demo scripts available online
- Help forum in source forge
- The website <http://gnuplot.sourceforge.net/demo/> has several examples of plot styles, commands and scripts for user convenience.
- Sourceforge has a user forum, which users can use to ask questions related plotting in gnuplot
- Books and demonstration scripts are available online for users to learn gnuplot. <http://gnuplot.info>

Uses of gnuplot

- The software can generate, Multiplot, boxplot, heatmap, contour map, logscale, and more
- Generate graphics output files in different formats such as pdf, postscript, svg, or ASCII
- Calculate statistics of column data such as median, quartile range, variance, average and standard deviation
- Data fitting for fitting datasets to user defined equation
- Can generate Latex files for the graph
- Allows scripting in many programming languages such as C, R or Python



Countout plot



3D plot