

1 LaTeXCompiler v0.0.4

laTexCompiler.sh is a short shell script written by KDTS (Kossi D. T. Saka). It is designed to compile a latex-document and generate a pdf-document using `pdflatex`:

- It can run/load a *gnuplot* file to plot images that are inserted in the latex document. This requires *gnuplot* to be installed.
- It can run *biber* to insert references from a *biblatex* document in the latex document, section 2. This requires *biber* to be installed.
- It can generate the *index* page for the pdf document, page 5.
- It can compile a latex-document that includes SVG images [3], (figure 2) . It may be necessary to install *inkscape*.
- It clears by default unnecessary documents like `*(.aux, .out, .toc, .bcf)`.

1.1 Keep it simple

the first objective of the program is to make it as easy as possible to generate pdf document from latex file without writing much command. To achieve this simplicity proceed as follow

1. open the script to edit the CONFIGURATION PART (lines 14 - 39)
2. follow the instructions to enter the name (and location path) of your documents
3. save the changes

That's it. NOW YOU CAN JUST CALL `./laTexCompiler.sh`
It's that simple!

1.2 Some commands

Generate pdf-document simple:

`./laTexCompiler.sh -t texDocument.tex`

in the case that the latex document is not located in the same directory as the script:

`./laTexCompiler.sh -t /path/to/texDocument.tex` (if you are in the directory where the script is located) or

`./path/to/laTexCompiler.sh -t texDocument.tex` (if you are in the directory where the latex document is located)

Load gnuplot file WITHOUT generating pdf-document

`./laTexCompiler.sh -p plot.tpl`

Load gnuplot file AND generate pdf-document including images

`./laTexCompiler.sh -t texDocument.tex -p plot.tpl`

Generate pdf-document AND insert references

`./laTexCompiler.sh -t texDocument.tex -b biblatexDocument.bib`

Generate pdf-document BUT do not clear file like `*(.aux, .out, .toc, .bcf)`

`./laTexCompiler.sh -t texDocument.tex --clear no`

Extended command

`./laTexCompiler.sh -t texDocument.tex -b biblatexDocument.bib -p plot.tpl --svg --index`

It loads gnuplot file; generates pdf-document including images as well as SVG images; inserts references AND creates the index.

1.3 Options

| Command | Alternative Command | Description |
|--|--|---|
| <code>-h</code> | <code>--help</code> | Display the help |
| <code>-t <file>¹</code> | <code>--texfile <file>¹</code> | Compile latex document |
| <code>-p <file>¹</code> | <code>--plotfile <file>¹</code> | Compile gnuplot-file to plot images for the latex document |
| <code>-b <file>¹</code> | <code>--bibfile <file>¹</code> | Bind biblatex-file to integrate references |
| <code>-s</code> | <code>--svg</code> | Compile tex-file regarding SVG images |
| <code>-i</code> | <code>--index</code> | Make index page |
| <code>-c [yes no]</code> | <code>--clear [yes no]</code> | Remove unnecessary like <code>*(.aux, .out, .toc, .bcf)</code> :: by default yes |

1.4 Inserted image using laTexCompiler.sh

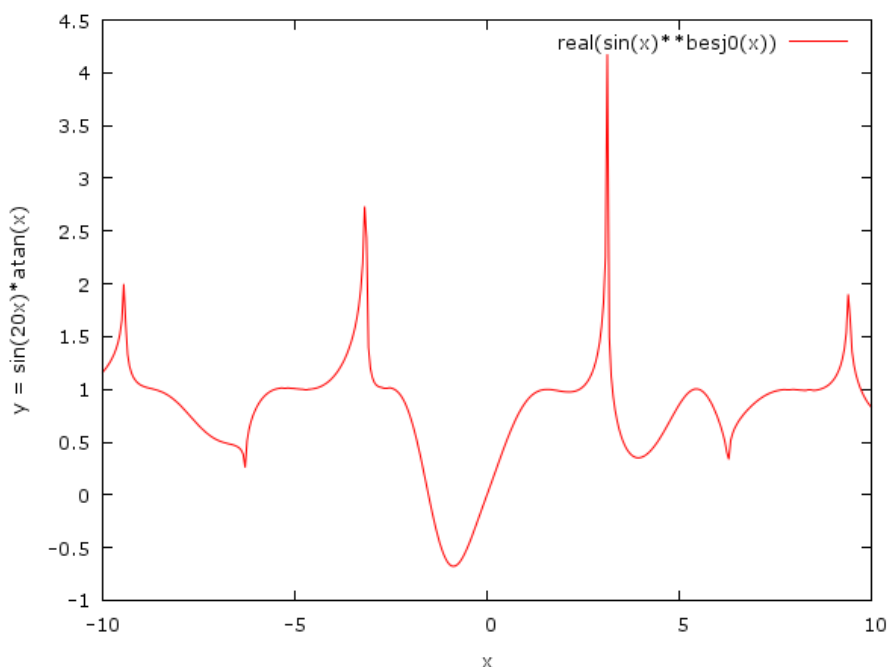


Figure 1: This is the caption 1.

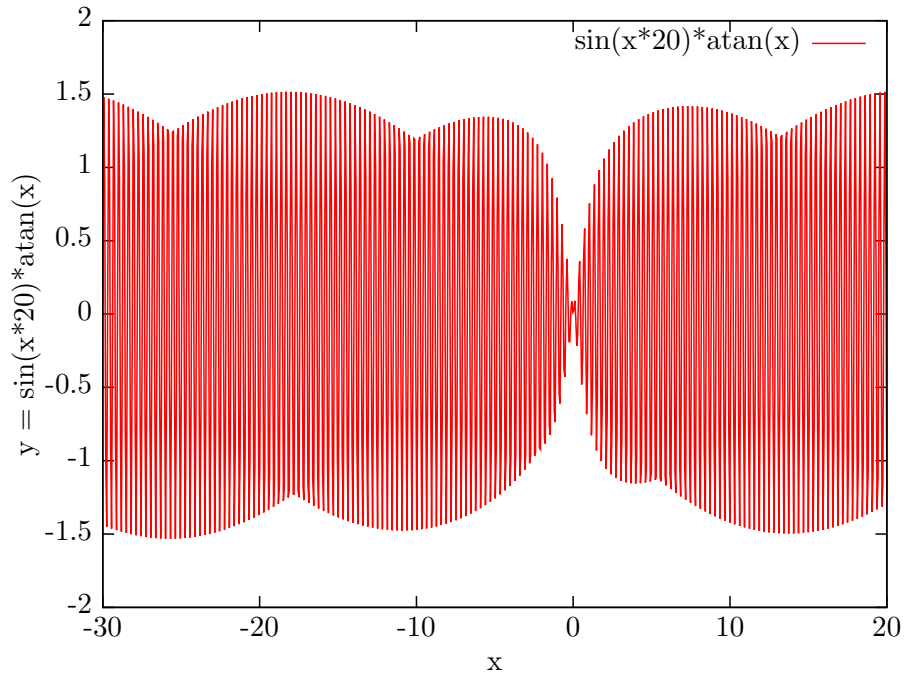


Figure 2: This is the caption 2.

1.5 Inserted SVG image using `laTeXCompiler.sh`

1.6 Using references

The five boxing wizards jump quickly [4]. Sympathizing would fix Quaker objectives. Many-wived Jack laughs at probes of sex quiz. Turgid saxophones blew over Micks jazzy quaff. Playing jazz vibe chords quickly excites my wife. A large fawn jumped quickly over white zinc boxes [2]. Exquisite farm wench gives body jolt to prize stinker. Jack amazed a few girls by dropping the antique onyx vase! The quick brown fox jumps over the lazy dog. Jackdaws love my big Sphinx of Quartz [1].

¹<file> or </path/to/file> depending on where the file is situated relative to the script.

2 Bibliography

- [1] W. Kaballo. *Grundkurs Funktionalanalysis*. Spektrum Akademischer Verlag, 2011. ISBN: 9783827427212.
- [2] F. Rieg, R. Hackenschmidt, and B. Alber-Laukant. *Finite Elemente Analyse für Ingenieure: Grundlagen und praktische Anwendungen mit Z88Aurora*. Carl Hanser Verlag GmbH & Company KG, 2014. ISBN: 9783446443181.
- [3] Kossi D. T. Saka. *Svg-Datei In Latex-Dokument Einbinden*. URL: <http://wpress.justhackit.de/hacks/latex/svg-datei-in-latex-dokument-einbinden/>.
- [4] H.R. Schwarz and N. Köckler. *Numerische Mathematik*. Vieweg+Teubner Verlag, 2011. ISBN: 9783834881663.

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