

## ***THE HISTORY***

First of all there was the windows calculator. Nice tool to make arithmetic and scientific calculus but when I discovered the power-toy-calculator I put aside the simple “1+1” machine for a command-line-well-done scientific calculator who accompanied me for a long time... until the arrival of win7. Indeed there wasn't no way to make power-toy-calculator working with win7.

So at that time I started to search a valid substitute, possibly open source, and I finally find Speedcrunch. It was all of what I had ever desired with one exception, the user wasn't able to define a function for a later re-use. I tried to understand if was possible that a new version would have, soon or later, implemented this feature, but I discovered that the project has been stopped many years ago. So the last thing left for me to do was to roll up my sleeves and to develop a scientific calculator by myself... and thus was born resParser.

**resParser** is a compact and effective scientific command line calculator able to execute arithmetic, trigonometric and transcendent computations with the best possible floating point precision. GMP and MPFR library has been used to achieve this purpose.

A set of built-in functions like sin, cos, exponential, sqrt, etc are already available, but is possible also to add and store new user-defined functions (like  $f(x)=\sin(x)*\cos(x)*\sqrt{x}$ ) in the library that is stored in the history.

The history is retained between sessions.

An infinite number of variables can be used to store the intermediate result of the computation and reuse them for the other calculations. All variables are stored in the history together with each commands typed by the user.

For mono-dimensional user defined functions is possible also to plot the graph in x,y axis. And it is possible to import and plot a RAW data sequence from a text file with x and y values.

The project is open source released with a GLP v2 license, it is cross platform and it is based on QT library.

## ***FEATURES***

- \* Command line input
- \* 50 digit of precision in the computations
- \* Built-in arithmetic, trigonometric and transcendent functions (log, exp, sin, cos, ...)
- \* Infinite number of variables to store intermediate results
- \* User defined functions
- \* Import of RAW data from text file (comma separated values x,y)
- \* Graphical plot of mono-dimensional user defined functions or imported RAW data
- \* Specific functions for computation of resistors value (E12, E24) rounding, parallel computation,  $k = 000$ ,  $M = 000000$
- \* Store the status (history of the commands, variables status) between session

## ***NOTES OF THE AUTHOR***

This software is OPEN SOURCE and released under GPL license so you can feel FREE to use, copy, share, (but above all) to study, analyze and modify it as you like (within the terms of the license).

If you like, hate or simply use this software, if you find any bug or have any request, please do not hesitate to let me know through the services offered by the site that hosts the project or through my Facebook page (<http://facebook.com/koalakoker>). And (if you think it's the case) do not hesitate to recommend the program to your friends.

It will be nice to mention me or just let me know if you reuse my code for another project.

If you feel the need to become part of the development team of the project, let me know and we'll discuss it together.

## ***REPOSITORIES***

The code is stored in a git repository freely available at:

- \* gitHub (<https://github.com/>)

- \* sourceforge (<http://sourceforge.net/>)

Executable for Windows and Linux will be available in the same portals.

See changelog for any detail.