

# Finanx 12c Calculator

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## Overview

**Finanx 12C** is a calculator that mimics a real financial calculator.

This software was developed for educational purposes. **IT'S NOT RECOMMENDED** using this calculator for professional calculations.

This software is freely available under General Public License (GNU/GPL). For more information about the license, please, read the file “COPYING.txt” that comes with the software or visit the GNU's website: [www.gnu.org](http://www.gnu.org).

Thank you for downloading and testing it!

## How To Use

Be sure that the Java software is installed. If not, download it at [www.java.com](http://www.java.com) and install it.

To execute the calculator, just double-click the file “**finanx.jar**”. Grant execution permissions, if required. As you can see, installing the calculator it not necessary. It allows that it can be executed from a flash drive.

If you wish to see internal details of the calculator's operation, instead of opening it double-clicking on “finanx.jar”, open it double-clicking the file “finanx.bat” (Windows) or “finanx.sh” (Linux/Unix).

The calculator's operation mimics the operation of the real HP12C Gold, therefore, in the case you don't know how to use it, search on the Internet for a user guide of that calculator.

## Configuration Tips

The most frequent settings are made in calculator's menu. These settings are saved when the calculator is closed.

Some extra configurations like keyboard shortcuts and general memory size are available only in a hidden configuration file. Although in most cases it's not necessary, we'll describe how to change them.

The configurations and memory data are saved in a hidden folder inside the user folder. The user folder is a place where personal files and settings of a specific user are stored. The most frequent paths are in the table below:

Operating System	Default path
Windows 2000, XP e 2013	C:\Documents and Settings\<user_name>
Windows Vista, 7 e 8	C:\Users\<user_name>
Linux e Unix	/home/<user_name>
Mac OS X	/Users/<user_name>

*Paths for user folders*

To configure the calculator, find the folder “**.finanx12c**” inside of your user folder. As it is a hidden folder, it's necessary to enable visualization of hidden files and directories. After finding the folder, open the file “**cfg.xml**” inside the folder “data”. This file keeps the calculator's settings. Change the values inside the tags that you need. Below is a list of the tags and it's respective meanings:

- **<lang>** Language used. Contains the language code, e.g: pt (portuguese), en (english), etc.
- **<stksize>** Stack size. In the real HP12C the stack has only 4 registers. If wish you can increase the quantity of registers.
- **<memsize>** General memory size. The default value is 20 registers. You can increase the quantity of registers in the general memory if you need to store more data.
- **<prgsize>** Programming memory size. The default value is 100 steps. A step is equivalent to a programming instruction. You can also increase the quantity of steps in the programming memory.
- **<keymap>** List of associations between keyboard keys and calculator buttons. For each item there are a pair of values: **<code>** and **<char>**.
  - **<code>** Numeric code of a button in the real HP12C calculator.
  - **<char>** A keyboard character. It can be letters, numbers, ASCII symbols, including the following escaped characters: \n \r \t \b \f \\' \' e \\. It's not case-sensitive.
- **<size>** Calculator size in the computer screen. The default value is 0.75, which corresponds to the small size.
- **<skin>** Skin used. The default value is “default”. In the current version there are only one skin. It's possible customization copying the “skin” folder from the jar file of the program to the “.finanx12c” folder. After that, all you need to do is to edit or substitute the images, since their names stay the same. If it is made incorrectly, the calculator won't work and it'll be necessary to remove the skin folder from “.finanx12c” folder.
- **<c>** “C” flag. Allowed values: 1 or 0. If 1, the “C” flag is enabled.
- **<dmy>** “DMY” flag. Allowed values: 1 or 0. If 1, dates will be in the DMY format.
- **<com>** Decimal dot flag. Allowed values: 1 or 0. If 1, a comma is used as decimal dot.
- **<alg>** “ALG” flag. Allowed values: 1 or 0. Not implemented yet. Ignore it.
- **<beg>** “BEG” flag. Allowed values: 1 or 0.
- **<fix>** Quantity of digits after the decimal dot. Allowed values: 0 to 9.
- **<mode>** Execution mode. Indicates how the calculator has to behave: like a HP12C Gold or a Platinum. Not implemented yet. Ignore it.

The end.

# APPENDIX

List of default shortcuts:

Calculator Button	Code	Keyboard key
KEY_0	0	0
KEY_1	1	1
KEY_2	2	2
KEY_3	3	3
KEY_4	4	4
KEY_5	5	5
KEY_6	6	6
KEY_7	7	7
KEY_8	8	8
KEY_9	9	9
KEY_DIV	10	/
KEY_N	11	n
KEY_I	12	i
KEY_PV	13	p
KEY_PMT	14	m
KEY_FV	15	v
KEY_CHS	16	h
KEY_MUL	20	*
KEY_POW	21	!
KEY_RECIPROCAL	22	\
KEY_PERC_TOT	23	#
KEY_PERC_DELTA	24	\$
KEY_PERC	25	%
KEY_EEX	26	e
KEY_SUB	30	-
KEY_RS	31	[
KEY_SST	32	]
KEY_ROLL	33	d
KEY_XY	34	y
KEY_CLX	35	c
KEY_ENTER	36	ENTER
KEY_SUM	40	+
KEY_ON	41	o
KEY_F	42	f
KEY_G	43	g
KEY_STO	44	s
KEY_RCL	45	r
KEY_DOT	48	.
KEY_TOT	49	w