USERS GUIDE

Calculator

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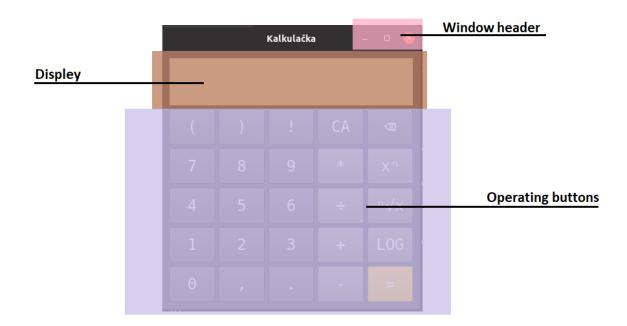
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Assignment

Calculator is a program designed to calculate simple math problems, such as basic mathematical operations, exponentiation with natural quotients, and the root of a number. Calculator also includes the use of brackets and some other secondary functions.

Interface

Appearance overview

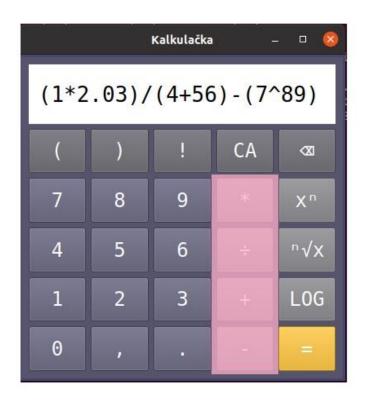


Calculator consists of **3** functional blocks: Operating buttons, Display and Window header. For a explanation of the functions, see the Functional Description section.

Functional description



- 1. **Numeric keys** (0 to 9): after pressing the corresponding key, displays the expected number on the display.
 - ".": Used to enter floating point numbers.
 - ", ": Used for Logarithm and Root functions.



2. Keys with simple mathematical operations $(*, \div, +, -)$: after pressing the corresponding key the expected operation will be shown on the display.

"*": Used to represent a multiplication operation in the form of x * y, where x and y are integers or real numbers.

Usage format: first_number * second_number, where to first_number apply the same rules as to x and to the second_number the same rules as to n.

" \div ": Used to represent a division operation in the form of x / y, where x and y are integers or real numbers, and y cannot be equal to 0.

Usage format: first_number / second_number, where to first_number apply the same rules as to x and to the second_number the same rules as to n.

"+": Used to represent addition operation in the form of x + y, where x and y are integers or real numbers.

Usage format: first_number + second_number, where to first_number apply the same rules as to x and to the second_number the same rules as to n.

"-": Used to represent a subtraction operation in the form of x - y, where x and y are integers or real numbers.

Usage format: first_number - second_number, where to first_number apply the same rules as to x and to the second_number the same rules as to n.



- 3. Keys with basic mathematical functions (x^n , $\sqrt[n]{x}$, $\log_x y$, x!): after pressing the corresponding key the expected function will be shown on the display.
 - " x^n ": Used to represent an exponentiation with natural quotients function in the form of x ^ n, where x is integer or real number, and n is integer number that cannot be less than or equal to 0.

Usage format: first_number ^ second_number, where to first_number apply the same rules as to x and to the second_number the same rules as to n.

" $\sqrt[n]{x}$ ": Used to represent a root function in the form of nrt(x,n), where x is an integer or real number, and n is a positive integer number.

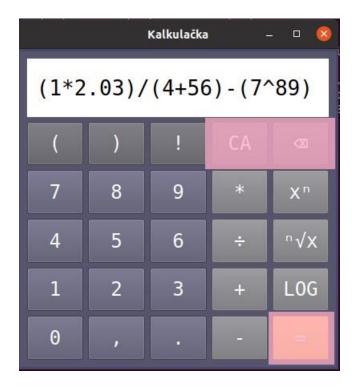
Usage format: nrt(first_number,second_number), where to first_number apply the same rules as to x and to the second_number the same rules as to n.

"LOG": Used to represent of a logarithmic function of a number y with respect to base x, where y is positive real or integer number and x is a real or integer number that cannot be less than or equal to 1.

Usage format: log(first_number, second_number), where to first_number apply the same rules as to y and to the second_number the same rules as to x.

"!": Used to represent the factorial function of a number x, where x is a positive integer number.

Usage format: number!, where to number apply the same rules as to x.



4. Keys for working with the result representation and display.

"CA": Used to fully clean the display. After pressing the corresponding key, clears all from the display.

"←": Used to clear a symbol from the display. After pressing the corresponding key, clears one symbol from the display.

"=": Used to show the result of the expression. After pressing the corresponding key, displays the result of the expression, replacing the expression with the result of the expression.

Work with Calculator

When you work with Calculator, you can use both the operating buttons and the keyboard.

You can press the number and operation keys in sequence to form an expression. If all conditions are correctly satisfied, after pressing the "=" key, the result of this expression will be displayed.

You can continue to work with the result as if it were a set number.

When typing an expression, it is possible to delete individual symbols of the expression with the "<-" key. To delete the entire expression, use the " CA " key.

Note: Brackets can only be used for Root and Logarithm functions. If you use brackets in normal expressions, an error will be displayed!