

# USER MANUAL

## SHORT GUIDE TO CALCULATHOR



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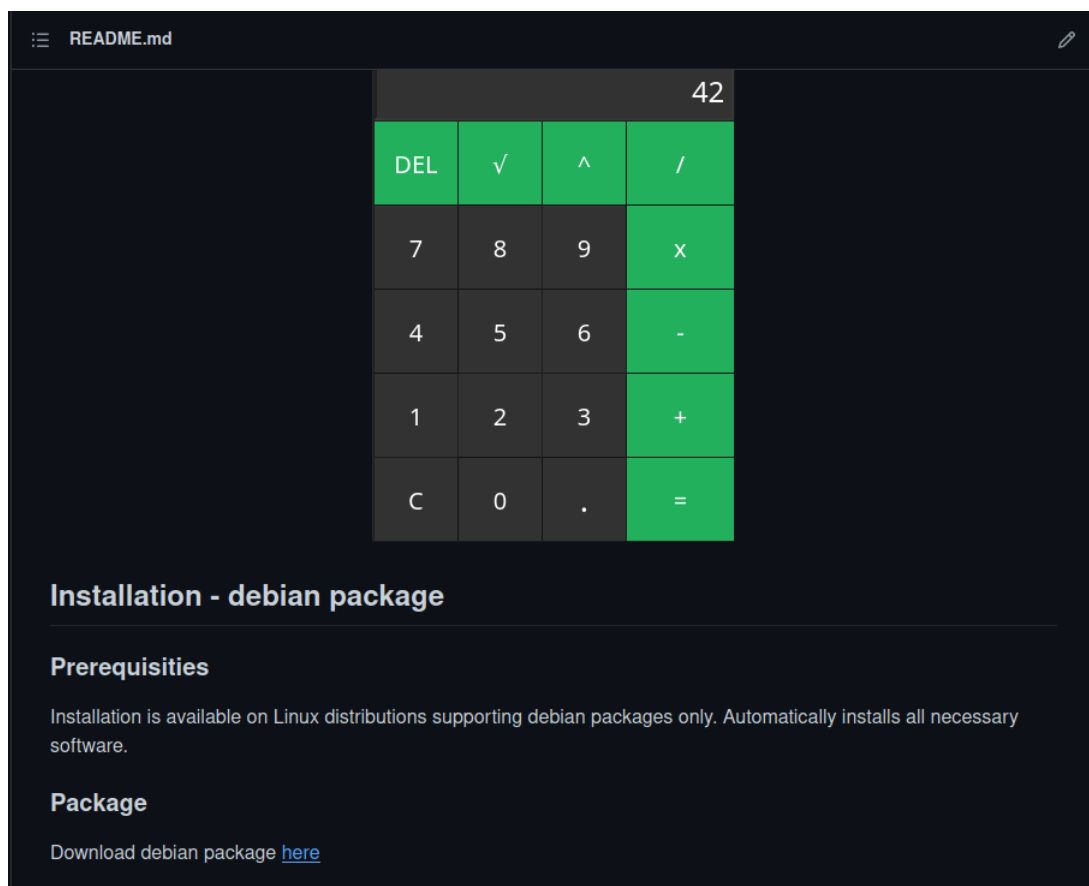
# 1 Introduction

CALCULATHOR is a simple calculator app designed for calculating simple mathematical problems. CALCULATHOR also contains some more complex mathematical operations, like functions and units convertor. Available functions are sin, cos, abs and factorial. Unit convertor support conversion between degrees and radians, kilowatts and horsepower, newton-metres and pound-feet. To use this calculator as efficiently as possible, please read this manual carefully.

## 2 Installation and launch

### 2.1 Download

Link to download CALCULATHOR can be found in README.md file.

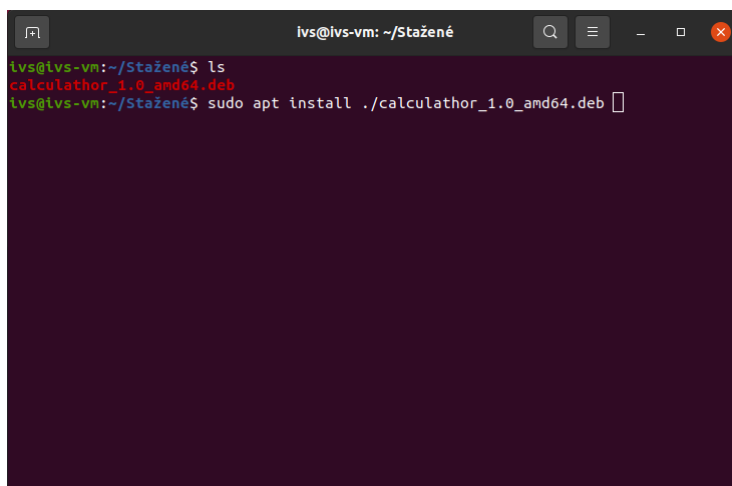


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## 2.2 Installation and launch

CALCULATHOR, as most of apps, must be installed prior to usage. Follow carefully following steps to ensure that your copy of CALCULATHOR is installed correctly:

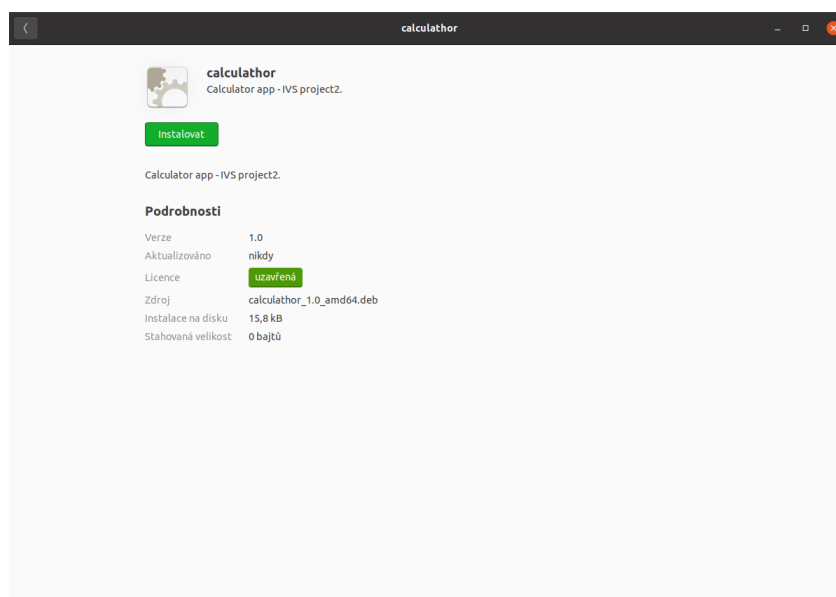
### 2.2.1 Installation via terminal



```
ivs@ivs-vm: ~/Stažené
ivs@ivs-vm:~/Stažené$ ls
calculathor_1.0_amd64.deb
ivs@ivs-vm:~/Stažené$ sudo apt install ./calculathor_1.0_amd64.deb
```

- Open terminal and move to directory, where CALCULATHOR is downloaded
- Use command - **sudo apt install ./calculathor\_1.0\_amd64.deb**
- Your copy of CALCULATHOR is now installed, check out section 2.3 to learn how to open the app

### 2.2.2 Installation via package

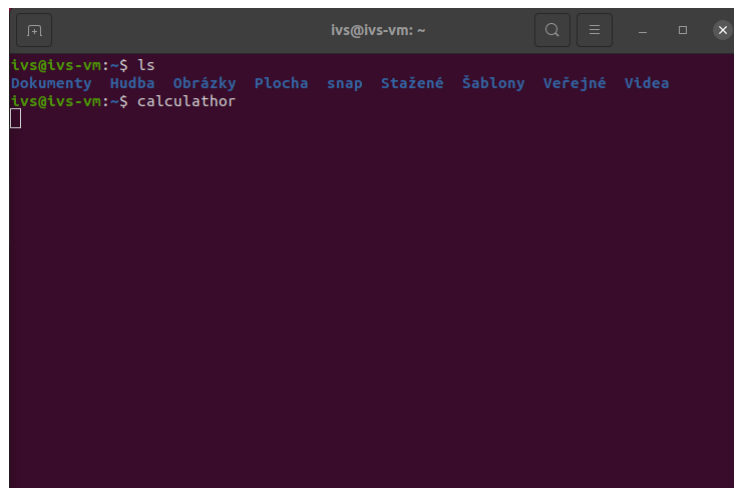


- Open folder, where CALCULATHOR is downloaded
- Double click on the **calculathor\_1.0\_amd64.deb** file with your mouse
- Press Install in the installer
- Your copy of CALCULATHOR is now installed, check out section 2.3 to learn how to open the app

## 2.3 Launch

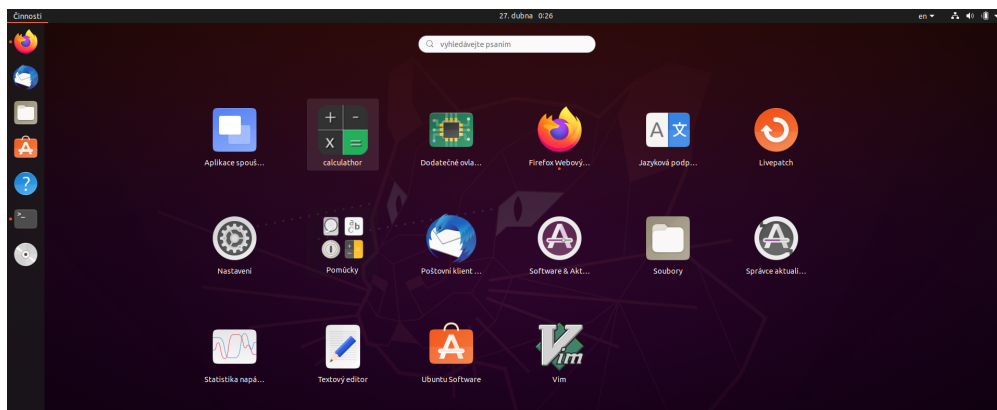
There are two ways CALCULATHOR can be launched.

### 2.3.1 Terminal



CALCULATHOR can be launched from anywhere in the terminal by using command: **calculathor**

### 2.3.2 Menu

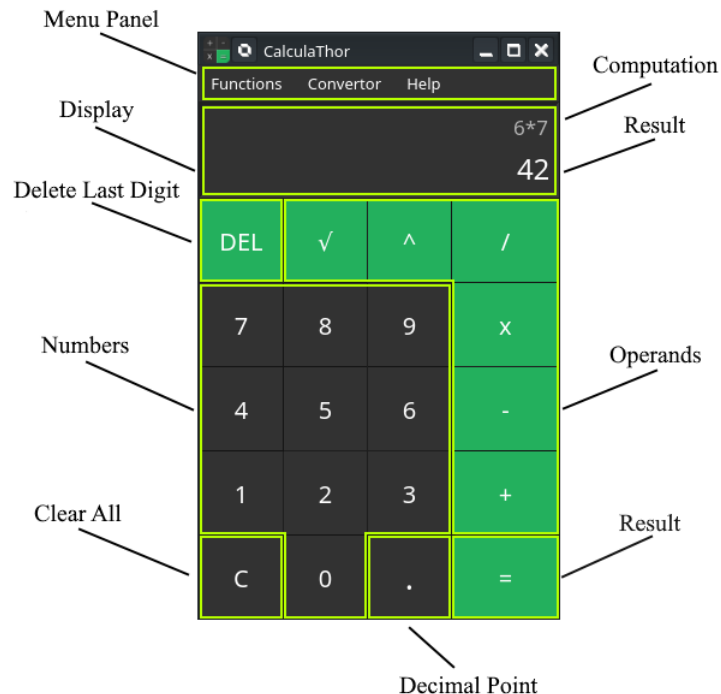


CALCULATHOR can be also launched from menu by double clicking on the calculathor icon

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## 3 Graphical interface of CALCULATHOR

### 3.1 Overview



All number in input are limited to  $\pm 1$  million, but there are some exceptions. This was implemented to prevent unexpected behaviour. If any number outside of this range is inserted, calculator will result in error message on the display.

### 3.2 Basic Operations

#### 3.2.1 Addition and Subtraction

Format of their input is  $a(+,-)b$ , where 'a','b' are numbers. These operations support calculating with negative numbers. Missing number after operand will result in Error message on the display.

#### 3.2.2 Multiplication and Division

Multiplication (\*) and division (/) do not have precedence from addition and subtraction. Format of their input is  $a(*,/)b$ , where 'a','b' are numbers. These operations support calculating with negative numbers. Missing number after operand will result in Error message on the display.

#### 3.2.3 Power

Format of power is  $a^b$ . This format represents  $a^b$  calculation, where 'a','b' are numbers. This operation support negative numbers, on both positions. Exponent is limited to number  $\pm 20$ . Missing number after operand will result in Error message on the display.

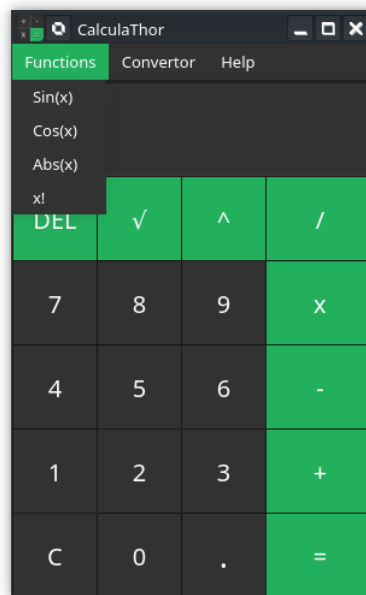
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### 3.2.4 Root

Format of root is  $a\sqrt[b]{}$ . This format represent  $\sqrt[a]{b}$  calculation, where 'a','b' are numbers. This operation does not support negative numbers at 'b' position, but supports negative numbers on 'a' position. Missing number after operand will result in the Error message on display.

## 3.3 Functions

These function were design to work alone, they do not work well with other operands. To avoid unexpected behaviour do not use any other operands while working with these functions.



### 3.3.1 Sin and Cos

Format of these functions is sin a/cos a, where 'a' is a number in degrees. These functions do not support calculating with radians. Negative numbers are supported. Input number is these functions are limited to +-10000. Missing number after function will result in Error message on the display.

### 3.3.2 Abs

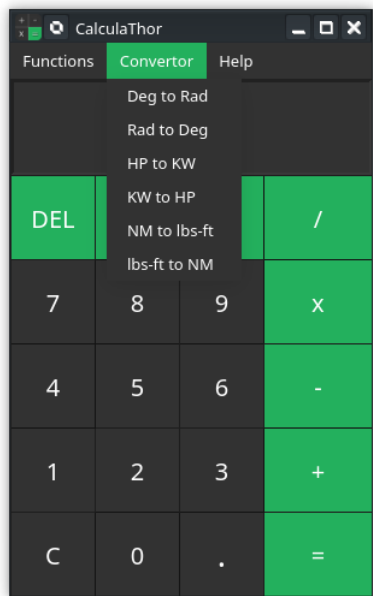
Format of this function is abs a, where 'a' is a number. This function supports calculating with negative numbers. Missing number after function will result in Error message on the display.

### 3.3.3 Factorial

Format of this function is a!, where 'a' is a number. Factorial is a function, which returns multiplications of all numbers in range  $<1,a>$ . In case of 'a' being equal to 0, this

functions return 1. This function does not support negative numbers and its upper limit is number 50.

### 3.4 Unit Convertor



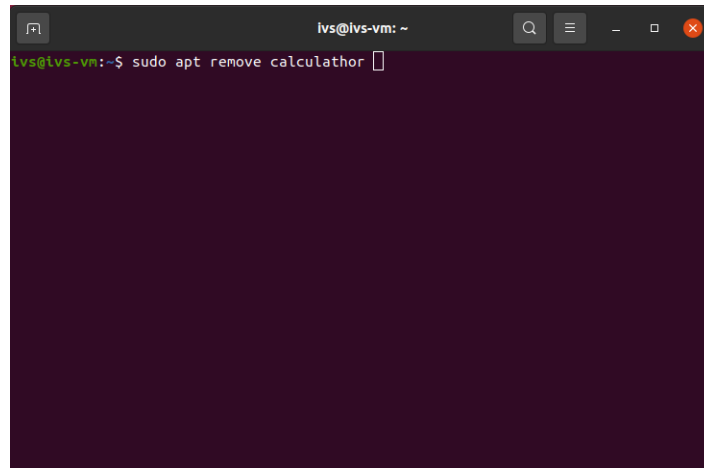
To use the unit convertor, number must be written onto the display before pressing one of the options, otherwise no operation will be executed. These convertors also support negative numbers. Units will be automatically removed from display, when calculating with convertor output.

## 4 Uninstallation

CALCULATHOR can be uninstalled via terminal or package.

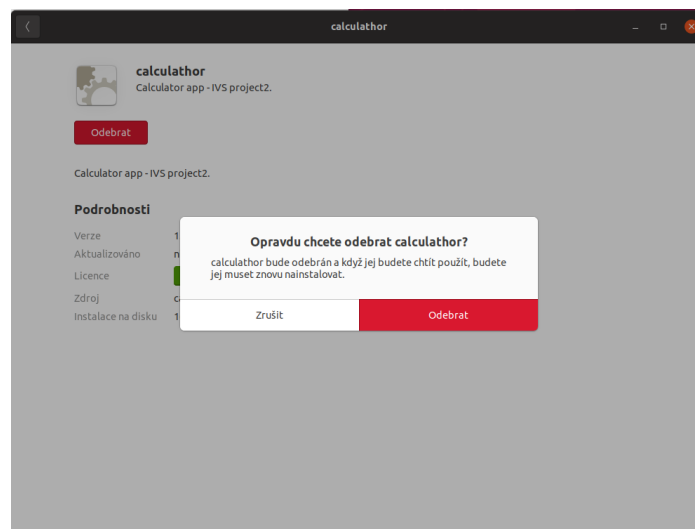
### 4.1 Uninstallation via terminal





- Open terminal and use command **sudo apt remove calculathor**
- CALCULATHOR is now successfully uninstalled

## 4.2 Uninstallation via package



- Double click on the file you used to install CALCULATHOR
- Click **Remove** button
- Confirm, that you want to uninstall CALCULATHOR
- CALCULATHOR is now successfully uninstalled