BRNO UNIVERSITY OF TECHNOLOGY
FACULTY OF INFORMATION TECHNOLOGY

NGLYD CALCULATOR – IVS Project

User manual

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CONTENTS

1. FOREWORD

This is a manual for the Calculator application created as a project for the IVS subject at FIT BUT by the NGLYD group. The Calculator can perform basic mathematical operations such as addition, subtraction, multiplication, division, factorial, nth power, square root, nth root, and modulo. The application is developed for Linux Ubuntu 64.

Manual also contains information about stddev application, which will calculate standard deviation from given numbers.

Video version can be found here: https://youtu.be/7aKtf3fzd5Y.

2. MAIN APP

Dependency Requirements

Before installing, please ensure that you have the `libqt5widgets5` and `qt6-base-dev` packages installed. If not, you can do so by opening the terminal on your device and executing the following commands:

```
sudo apt update

sudo apt install libqt5widgets5

sudo apt install qt6-base-dev
```

Installation

Open the terminal on your device and navigate to the directory where you have saved the `calculator-1.0-Linux.deb package`. Then, execute the following command:

```
sudo dpkg -i calculator-1.0-Linux.deb
```

To locate where the application files have been installed, execute the following command:

```
dpkg-query -L calculator
```

After completing these steps, you can execute the application either from the terminal by navigating to the directory where the app was saved or by opening the app executable on your main menu.

If you have any trouble installing Calculator application, don't hesitate to contact us and we will help you with installation.

Uninstallation

To uninstall the Calculator app, open the terminal on your device and execute the following command:

```
sudo dpkg -r calculator
```

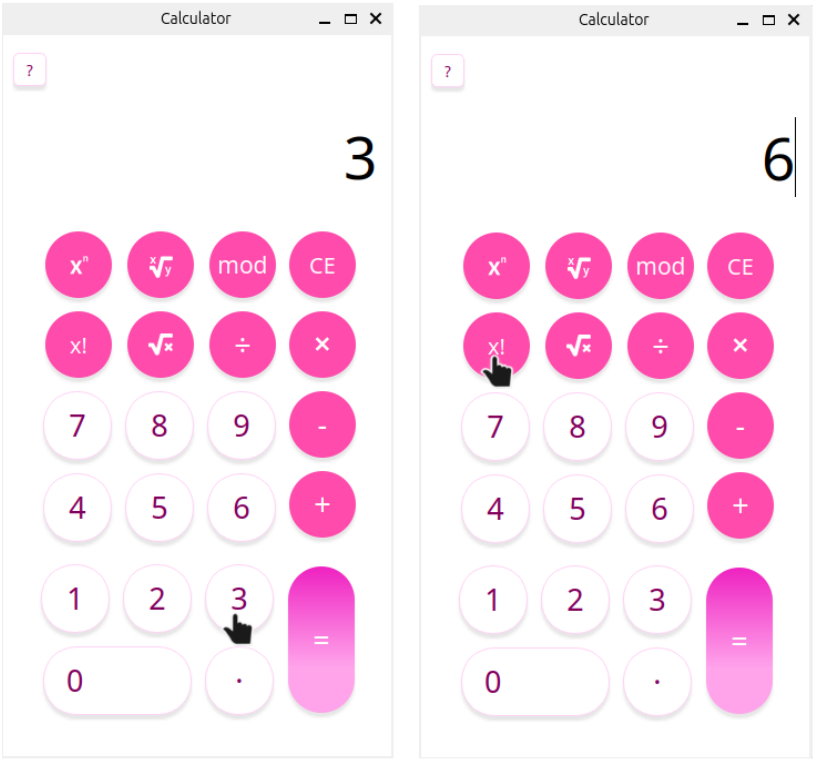
To verify if the uninstallation was successful, execute the following command in the terminal and ensure that the Calculator application isn’t listed:

```
dpkg -l | grep calculator
```

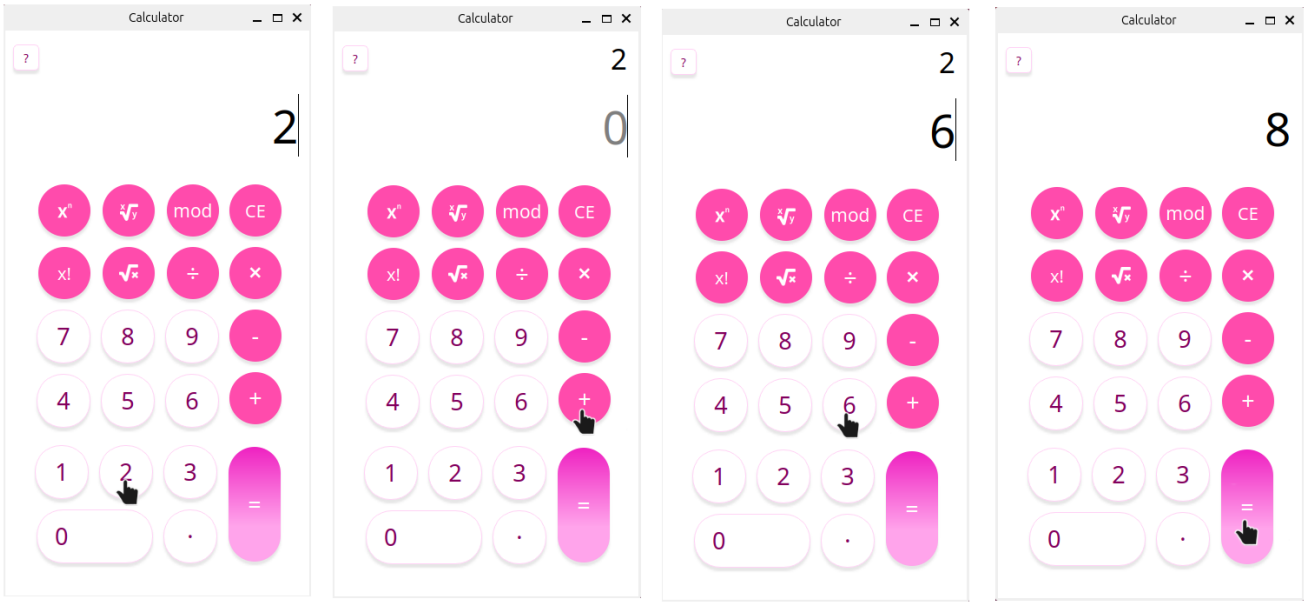
If the previous command for uninstallation was unsuccessful, try deleting all source files manually.

Instructions for Use

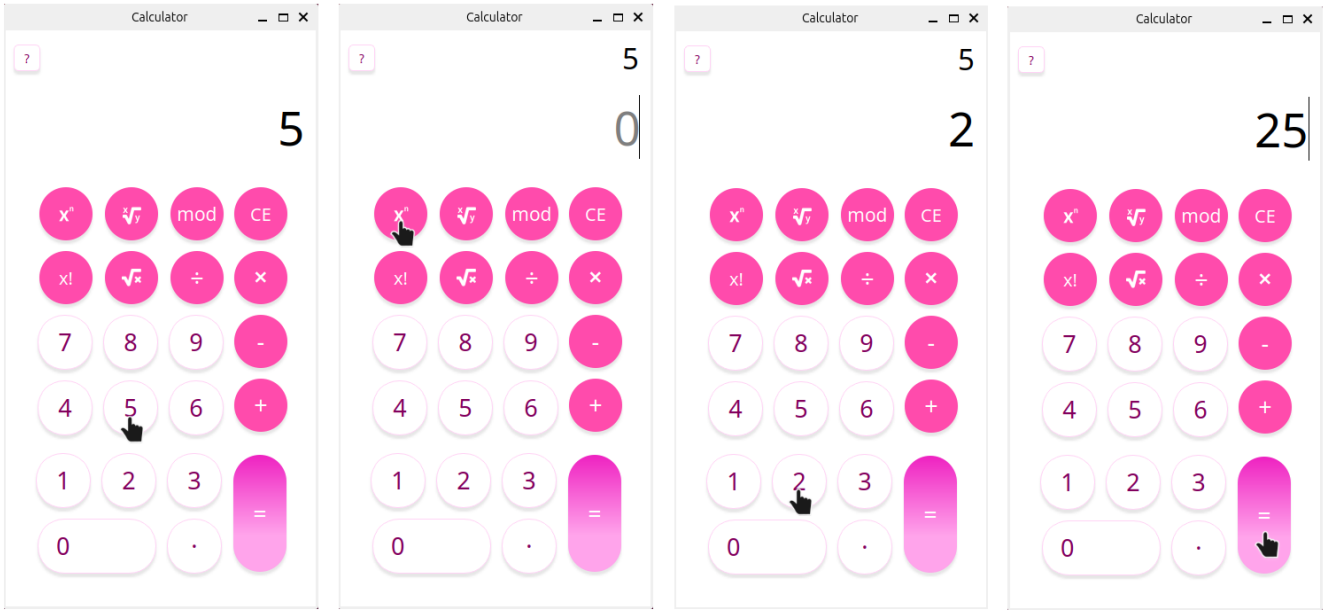
The application can be used either by keyboard on your device or by clicking on the symbols in the app window. To use unary operators such as factorial and square root, start by entering a number, then click on the selected unary operator.



For binary operators, proceed as follows: first enter the first operand, then select the binary operator, enter the second operand, and finally click the `=` button.



If you want to use operations such as the nth root or the nth power, start by entering the number you want to multiply/subtract. Then click on the selected function, enter the number, and finally click the `=` button.



3. PROFILING

Installation

Open the terminal on your device and navigate to the directory where you have saved the `profiling-1.0-Linux.deb` package. Then, execute the following command:

```
sudo dpkg -i profiling-1.0-Linux.deb
```

To locate where the application files have been installed, execute the following command:

```
dpkg-query -L profiling
```

If you have any trouble installing profiling application, don't hesitate to contact us and we will help you with installation.

Uninstallation

To uninstall the profiling app, open the terminal on your device and execute the following command:

```
sudo dpkg -r profiling
```

To verify if the uninstallation was successful, execute the following command in the terminal and ensure that the profiling application isn’t listed:

```
dpkg -l | grep profiling
```

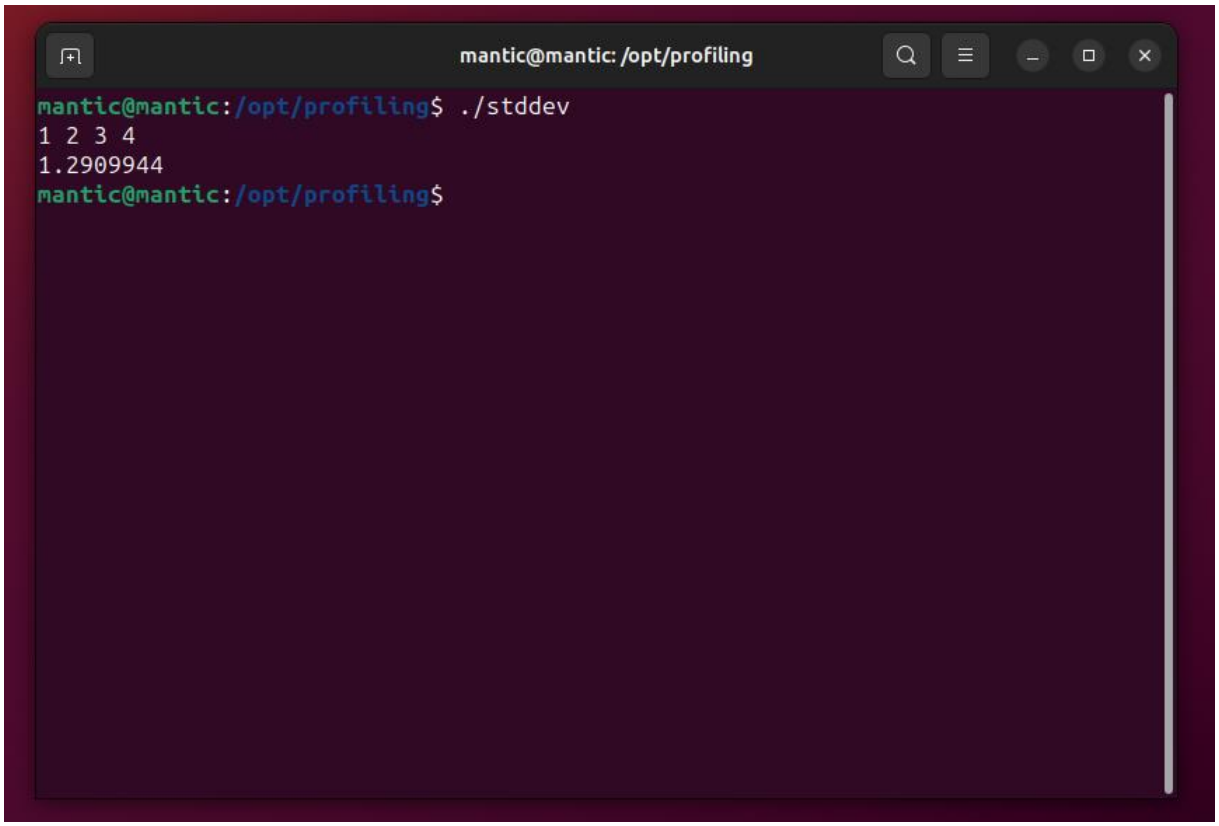
If the previous command for uninstallation was unsuccessful, try deleting all source files manually.

Instruction for Use

The application can be executed in the terminal by navigating to the directory where the app was saved and executing the following command:

```
./stddev
```

After that, insert the desired sequence of numbers, press `ENTER` and press `CTRL+D`



or

```
./stddev < data.txt
```

where data.txt is a text file containing numbers you wish to calculate standard deviation from separated by whitespace character.

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