SmartCalc instructions for use

AndreyZhelannikov

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1   brief introduction

Hi, this is a SmartCalculator application whose frontend is developed using Qt, and the backend is developed in C SmartCalc was developed on the MacOs Monterey with chip Apple M1

This application can not only do calculations, but also draw graphs of functions

The application implements most of the trigonometric functions , several logarithmic functions, as well as all the mathematical operations usually available in each calculator

2 functions and operators

The following mathematical operations and functions are implemented in the calculator:

- Arithmetic operators

  - Brackets – "( )"
  - Addition – "a + b"
  - Substraction – "a - b"
  - Multiplication – "a * b"
  - Division – "a / b"
  - Power – "a ^ b"
  - Modulus – "a mod b"
  - Unary plus – "+a"
  - Unary minus – "-a"

- Functions

  - $cos(x)$
  - $sin(x)$
  - $tan(x)$
  - $acos(x)$
  - $asin(x)$
  - $atan(x)$
  - $sqrt(x)$
  - $ln(x)$
  - $log(x)$

  These functions also are supported by the plotter.

3 plotter/grapher

In this project, the Qcustomplot module is used. It is possible to set a range of values for display in the application