Erik Chan (ejc233)
Brendan Taylor (bkt28)
Elijah Wilt (ew356)
Chenxi Wu (cw538)
Alex Xu (ax35)

Documentation

For our C++ final project we created a C++ calculator that is integrated into Python. To run it, type "make" in the correct directory, then "python gui.py"

Our calculator has the following functionalities:

- 4 functions: the 4 standard infix operators (addition, subtraction, multiplication, division) by typing ("+","-", "*", "/")
- Parentheses: parts of arithmetic expressions can be grouped in parentheses and the calculator will take that into account.
- Powers: Use "^" (infix)
- Modulus: Use "%" (infix)
- Boolean comparison: Using "<" or ">" will output 0 or 1 (false or true)
- Constants: "Pi" for the value of π, "E" for e
- Trigonometry: sin, cos, tan, atan, acos, asin. Type any of these then the argument to evaluate the expression
- Other functions: log
- Programming language: examples can be found in testcases.txt. Can assign variables with ":" and access memory with "$". Breaks between lines are denoted with ";".

All of these functions can be used by typing the commands into the python GUI interface.

Source code for calculator functions in cal.cpp