

Lab 2

Assumptions:

- there will be some cases that will result in an error in the decimal places due to double precision errors
- numbers entered and results will not be more than the range of double variables

How to use:

- you can only choose one operation at a time, if multiple operations are entered the last one is what gets displayed and computed (the operator will change as you press multiple operators as long as you don't enter the second operand)
- If you entered a number and (square, root, %, reciprocal) it, it's considered a result after that so you can't put a point next to it, nor put a number next to it (if you put a number the result gets deleted and the new number is displayed)
- square, root, %, reciprocal, and the +/- sign are all unary operations in my calculator, so it's done on the last number entered only
- the +/- sign is only applied when a number is entered so to enter -2 you must type the 2 first
- When an error appears, just pressing any button will make the calculator function again
- If you entered a number then an operator and then pressed = or any other unary operation (except +/-) the operator is removed and the required operation is made on the first number (I am talking about the case with no second operand)

- If two numbers and an operator are entered (you didn't press enter yet) and you entered a second operator, the first expression with the first operator is evaluated, then the second operator is displayed next to the result
- % divides the number by a hundred
- C and CE clear all the expressions on the screen
- You can't delete a result (I mean you can't delete digits from a number that is considered a result) so you either press C or CE or enter another number to replace the result
- If you just entered a dot (.) it's considered a 0. or .0
- You can't enter more than one dot in the number
- If you entered two numbers and made a unary operation (except +/-) the second number is then considered a result so if you try to enter a number again the whole expression is deleted, you can either press equal or another operation