

# Programming II

## Calculator assignment

### How-To Document

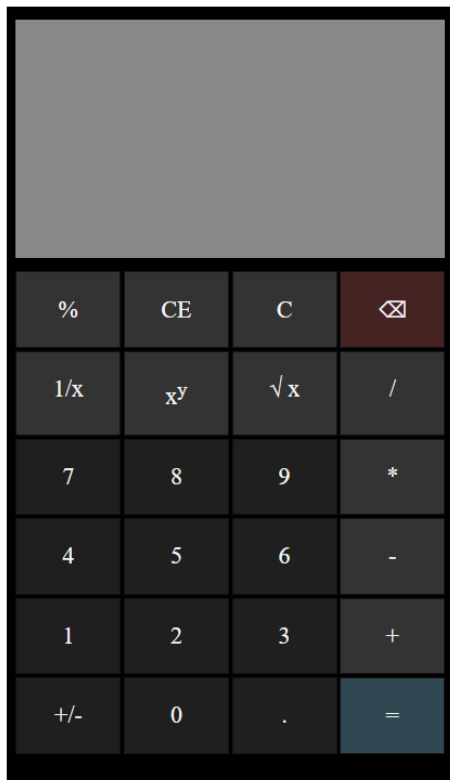
NAME

ID

Antoine Talaat Zaki

19015486

#### a. Calculator Overview



## b. Assumptions

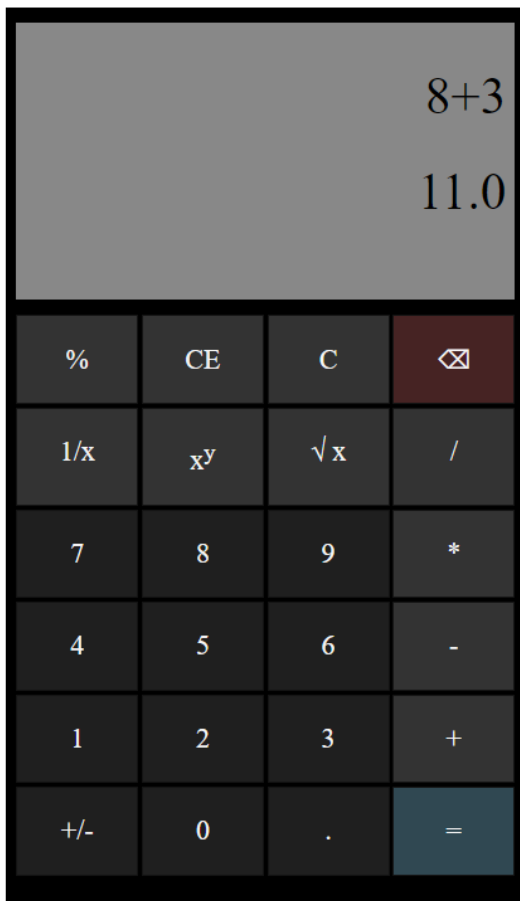
This calculator uses the keypad of the windows calculator but with the functionality of the android calculator.

The user is not allowed to enter multiple floating points in a single operand or use two successive operators (see “using negative operands” in section C).

## c. How to use

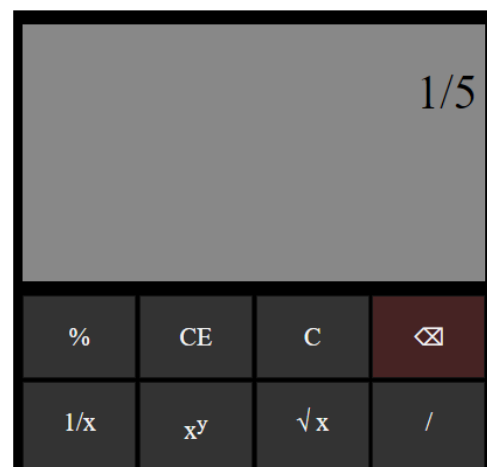
- **Addition, Subtraction, Division, Multiplication:**

Using corresponding buttons normally



- **Reciprocal:**

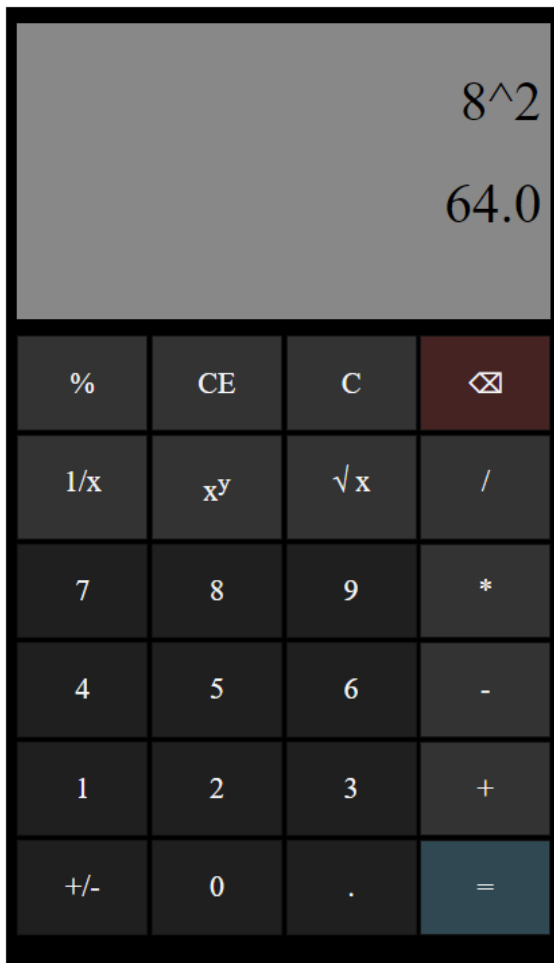
We enter the number we want to use its reciprocal, then we press the button  $1/x$



- **Power and Square root:**

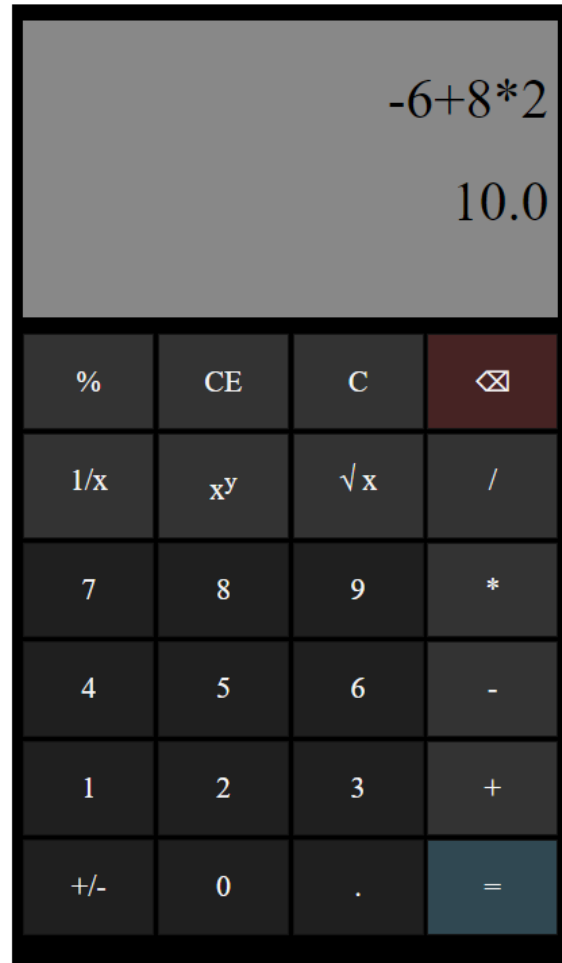
Pressing Power prints a  $^$  symbol that is translated in the back end to indicate that exponential operation.

Pressing square root prints  $^0.5$  on the screen which is enough to calculate the square root of the needed number.



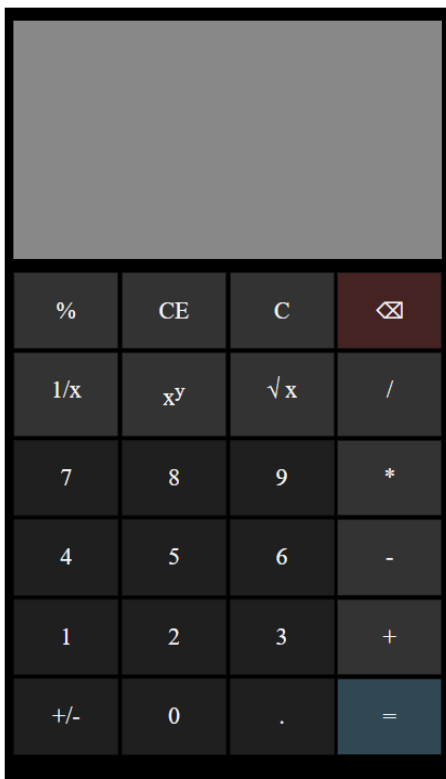
- **Using negative operands:**

In this program, we prevent the user from entering two successive operands thus entering any operand followed by  $-$  button is prohibited. However, user can use the +/- button to add the  $-$  sign to his expression.



- **Clearing and deleting:**

Pressing the arrow will erase one symbol from the expression. Pressing the C or CE will erase the whole display.



- **Percentage**

% symbol in this program is considered as normal percentage symbol that considers the value given is 1/100 of the written value as follows.

