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Lab 2 calculator

Assumptions:

- Port for frontend is http://localhost:4200/.
- Port for backend is http://localhost:8082/.
- Only one operation is done each time (entering a second operator acts like pressing "=" then the second operator is added).
- C button does the same function as CF button which clears the input field.
- All functions return numbers in double form.
- One-operand operations are performed on existing shown number and their result are obtained just after pressing the operation button.
- If an error happens, the written express is deleted and "e" appears.
- Negative sign button cannot be clicked more than one time successively if happen gives error.

Functionalities:

- That calculator performs:
    - Two operands operations:
        - Addition.
        - Subtraction.
        - Multiplication.
        - Division.
        - Modulo.
    - One operand operations:
        - Squaring.
        - taking square root.
        - getting multiplicative inverse.
- Errors handled:
    - Division by zero.
    - Taking square root for a negative number.
    - Empty operand (ex: 5+ or + or +5).

How to use:

- Press the buttons to enter the operands and the operator.
- Press "=" to show output in case of two operands operations.
- On pressing a button of a new operation the old operation is obtained immediately and the result is considered as the first operand (in case of two-operand new operation) and as the only operand (in case of one-operand new operation) and give the new result.
- You must enter the number before using one-operand operations.
- Use "rootx" button to calculate square root of the number in the input field.
- "Del" button deletes only the last character.
- "C" and "CF" buttons clear the input filed.
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- "-/+" button is a negative sign not "subtraction" so there must be an operation to be done on the negative number.

Video with sample runs

https://drive.google.com/open?id=146QbHKKJgJLVGZLn_N8ZiFla0l7Sznpm&authuser=ahmehesham1652001%40gmail.com&usp=drive_fs