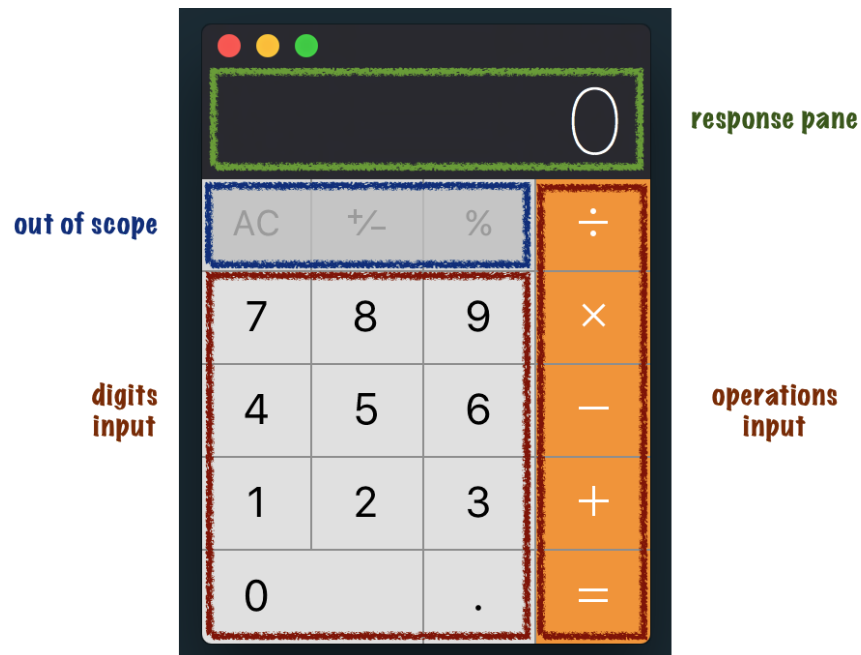


## Coding Exercise: **Browser-based Javascript Calculator**

### Description

Please implement a very rudimentary calculator, with a classic interface similar to those found in many settings, including the one in several Apple products, like iOS and OSX (see image below).



OSX calculator interface (example)

Input to the calculator will come via mouse clicks to your HTML elements.

All input will be echoed to the response pane, with results rendered on press of any (orange) operation button. Order of operations and chained operations (see **Testing**, below) should be supported.

Your calculator should show an error on any division by zero or overflow beyond 10 digits.

Our testers will specifically be looking to test the (orange) basic arithmetic operation buttons for addition, subtraction, multiplication and division of rational numbers (not just integers!).

The other buttons (`AC`, `±` and `%`) are not required in this exercise.

### Constraints

Your solution is expected to consist of plain-text source files, limited to content in:

- **Javascript**
- **HTML**
- **CSS**

### The "No JQuery" Rule

You are not permitted to import any third party libraries or frameworks, and are asked here to implement this entirely in the native structures offered in the above standards.

## Testing

Some example interactions with the calculator are provided below.

### Example 1: Rational Addition

Input	Result Pane
2	2
3	23
.	23.
5	23.5
+	23.5
7	7
=	29.5

### Example 2: Chained Operations

Input	Result Pane
2	2
+	2
3	3
-	5
1	1
7	17
=	-12

### Example 3: Chained and Ordered Operations

Input	Result Pane
2	2
+	2
3	3
*	3
8	8
=	26

### Example 4: Division by Zero

Input	Result Pane
2	2
/	2
0	0
=	Undefined

### Example 5: Overflow 10 digits

Input	Result Pane
2	2
0	20
0	200
0	2000
0	20000
*	20000
9	9
9	99
9	999
9	9999
9	99999
*	1799820000
9	9
=	Error