JavaScript Calculator Code Documentation

Selecting Buttons and Screen

The line `let buttons = document.querySelectorAll('.buttons .btn');` selects all elements with class `btn` inside the container having class `buttons`. The line `let screen = document.getElementById('Scr');` selects the display area where input and results are shown.

Adding Event Listeners to Buttons

Using `buttons.forEach`, the script loops through all calculator buttons. Each button gets an event listener for the 'click' event. When clicked, the button's value (`e.target.value`) is used to determine the action.

Clear Screen (C)

If the button clicked has value 'C', the screen is cleared using `screen.innerHTML = ";`. This resets the calculator display to empty.

Evaluate Expression (=)

If the button clicked is '=', the current expression inside the screen is evaluated using `eval()`. • If result is Infinity, -Infinity, or NaN, it shows 'Error'. • If result is decimal, it is rounded to 4 decimal places. • Otherwise, the result is displayed normally.

Delete Last Character (del)

If the button clicked is 'del', the last character from the screen is removed using `slice(0, -1)`.

Percentage (%)

If the button clicked is '%', the current value is divided by 100. Example: $50 \rightarrow 0.5$.

Toggle Sign (+/-)

If the button clicked is '+/-', the current value is multiplied by -1, changing positive to negative or vice versa.

Appending Numbers and Operators

If the button is a number or operator, it is simply appended to the current screen content using string concatenation.