

W01-P1: 取得畫面輸入，4 個按鈕，兩個輸出，共 7 個，透過 console.log 印出

The image shows a development environment with Visual Studio Code on the left and a web browser on the right. In VS Code, the `app.js` file is open, and lines 10 through 16 are highlighted with a red box. These lines use `console.log` to print out the `userInput`, the four operation buttons (`addBtn`, `subtractBtn`, `multiplyBtn`, `divideBtn`), and the two result outputs (`resultsCurrent`, `calculationCurrent`). The web browser displays the title "The Unconventional Calculator" and a form with an input field, four buttons (+, -, *, /), and two output areas. The first output area shows "0" and the second shows "Result: 0". The browser's DevTools console is open on the right, showing the HTML structure of the page with the same elements highlighted by a red box.

W01-P2: 能做加法計算 operand1 + operand2

This image shows the same development environment as the previous one, but now the calculator is performing an addition. In VS Code, the `app.js` file is open, and lines 23 through 45 are highlighted with a red box. This code block defines the `defaultResult`, `currentResult`, and `add()` function. The `add()` function retrieves the current result and user input, calculates their sum, and updates the UI. The web browser shows the calculator interface with the input field containing "10", the "+" button selected, and the first output area displaying "5 + 10". The second output area now shows "Result: 15". The DevTools console on the right shows the execution of the `add` function, with the calculation `5 + 10 = 15` highlighted by a red box.

W01-P3: 能做減法計算 operand1 - operand2

The screenshot shows the development environment for 'The Unconventional Calculator'. On the left, the VS Code editor displays the `app.js` file. The `subtract()` function is highlighted with a red box, showing its logic for calculating the difference between two operands. Below it, the event listener for the subtraction button is also highlighted. On the right, the web browser shows the calculator's interface. The display shows the number '5'. Below the display, the subtraction button is highlighted. The calculator shows the operation `-5 - 5` and the result `Result: -10`. The browser's console shows the log output from the `subtract()` function.

```
function subtract(){
  const operand1 = currentResult;
  const operand2 = getUserInput();
  currentResult = operand1 - operand2;
  console.log(`${operand1} - ${operand2} = ${currentResult}`);
  const calcText = `${operand1} - ${operand2}`;
  outputResult(currentResult, calcText);
}

function multiply(){
  const operand1 = currentResult;
  const operand2 = getUserInput();
  currentResult = operand1 * operand2;
  console.log(`${operand1} * ${operand2} = ${currentResult}`);
  const calcText = `${operand1} * ${operand2}`;
  outputResult(currentResult, calcText);
}

function divide(){
  const operand1 = currentResult;
  const operand2 = getUserInput();
  currentResult = operand1 / operand2;
  console.log(`${operand1} / ${operand2} = ${currentResult}`);
  const calcText = `${operand1} / ${operand2}`;
  outputResult(currentResult, calcText);
}

addBtn.addEventListener('click', add);
subtractBtn.addEventListener('click', subtract);
multiplyBtn.addEventListener('click', multiply);
divideBtn.addEventListener('click', divide);
```

W01-P4: 能做乘法計算 operand1 * operand2

The screenshot shows the development environment for 'The Unconventional Calculator'. On the left, the VS Code editor displays the `app.js` file. The `multiply()` function is highlighted with a red box, showing its logic for calculating the product of two operands. Below it, the event listener for the multiplication button is also highlighted. On the right, the web browser shows the calculator's interface. The display shows the number '10'. Below the display, the multiplication button is highlighted. The calculator shows the operation `10 * 10` and the result `Result: 100`. The browser's console shows the log output from the `multiply()` function.

```
function subtract(){
  const operand1 = currentResult;
  const operand2 = getUserInput();
  currentResult = operand1 - operand2;
  console.log(`${operand1} - ${operand2} = ${currentResult}`);
  const calcText = `${operand1} - ${operand2}`;
  outputResult(currentResult, calcText);
}

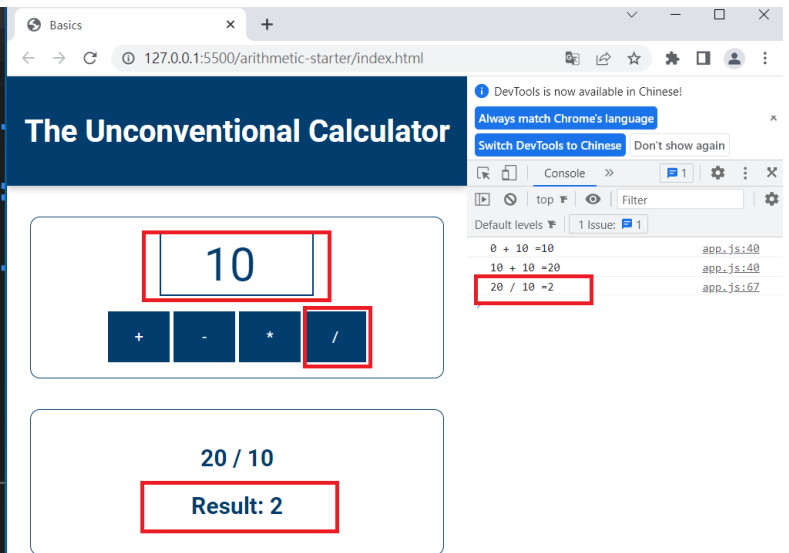
function multiply(){
  const operand1 = currentResult;
  const operand2 = getUserInput();
  currentResult = operand1 * operand2;
  console.log(`${operand1} * ${operand2} = ${currentResult}`);
  const calcText = `${operand1} * ${operand2}`;
  outputResult(currentResult, calcText);
}

function divide(){
  const operand1 = currentResult;
  const operand2 = getUserInput();
  currentResult = operand1 / operand2;
  console.log(`${operand1} / ${operand2} = ${currentResult}`);
  const calcText = `${operand1} / ${operand2}`;
  outputResult(currentResult, calcText);
}

addBtn.addEventListener('click', add);
subtractBtn.addEventListener('click', subtract);
multiplyBtn.addEventListener('click', multiply);
divideBtn.addEventListener('click', divide);
```

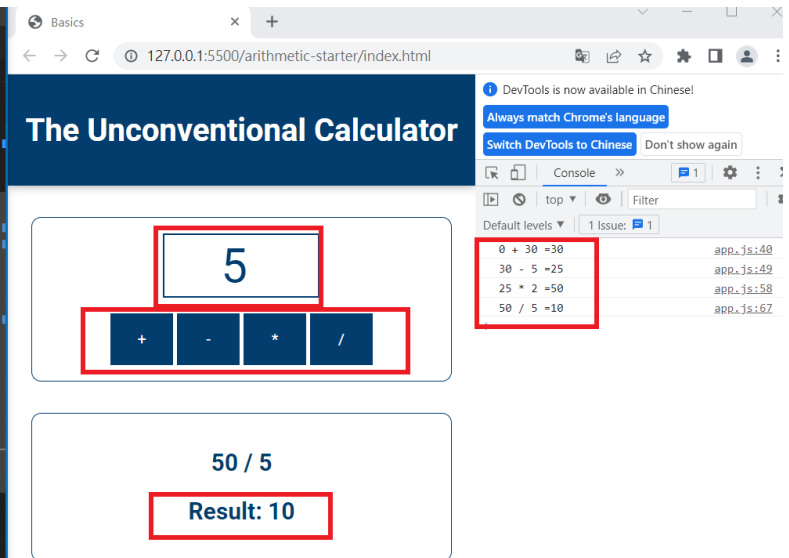
W01-P5: 能做除法計算 operand1 / operand2

```
index.html JS app.js x
arithmetic-starter > js > JS app.js > divide
44
45 function subtract(){
46   const operand1 = currentResult;
47   const operand2 = getUserInput();
48   currentResult = operand1 - operand2;
49   console.log(`${operand1} - ${operand2} = ${currentResult}`);
50   const calcText = `${operand1} - ${operand2}`;
51   outputResult(currentResult,calcText);
52 }
53
54 function multiply(){
55   const operand1 = currentResult;
56   const operand2 = getUserInput();
57   currentResult = operand1 * operand2;
58   console.log(`${operand1} * ${operand2} = ${currentResult}`);
59   const calcText = `${operand1} * ${operand2}`;
60   outputResult(currentResult,calcText);
61 }
62
63 function divide(){
64   const operand1 = currentResult;
65   const operand2 = getUserInput();
66   currentResult = operand1 / operand2;
67   console.log(`${operand1} / ${operand2} = ${currentResult}`);
68   const calcText = `${operand1} / ${operand2}`;
69   outputResult(currentResult,calcText);
70 }
71
72
73 addBtn.addEventListener('click',add);
74 subtractBtn.addEventListener('click',subtract);
75 multiplyBtn.addEventListener('click',multiply);
76 divideBtn.addEventListener('click',divide);
77
```



W01-P6: 能做四則計算，加減乘除都要執行一遍，可任意順序，結果要正確

```
index.html JS app.js w01_39.md
arithmetic-starter > js > JS app.js > ...
14 //console.log( multiplyBtn, multiplyBtn);
15 //console.log( divideBtn, divideBtn);
16
17 //console.log('currentResultOutput',currentResultOutput);
18 //console.log('currentcalculationOutput',currentcalculationOutput);
19
20 //const buttons = document.querySelector('button');
21 //console.log('buttons',buttons);
22
23 const defaultResult = 0;
24 let currentResult = defaultResult;
25
26 > function getUserInput(){...
27 }
28
29 > function outputResult(result, text){...
30 }
31
32 //operand1 operand2 0 + 5
33 > function add(){...
34 }
35
36 > function subtract(){...
37 }
38
39 > function multiply(){...
40 }
41
42 > function divide(){...
43 }
44
45 addBtn.addEventListener('click',add);
46 subtractBtn.addEventListener('click',subtract);
47 multiplyBtn.addEventListener('click',multiply);
48 divideBtn.addEventListener('click',divide);
49
```



git log --pretty=format:"%h%x09%an%x09%ad%x09%s" --after="2023-02-15"
9bb0f87 21141003901~ Thu Feb 16 20:43:13 2023 +0800 all
ea1ee23 211410039 Thu Feb 16 20:31:24 2023 +0800 Update [README.md](#)

eb5e53e 211410039 Thu Feb 16 20:30:03 2023 +0800 Update [README.md](#)

0db1553 211410039 Thu Feb 16 20:29:42 2023 +0800 Initial commit