W02-P1: refine the code in week 1 using ony one compute function


```
     3     const l = console.log
     4     const $lib = {
     5       userInput: $('.input-number'),
     6       addBtn: $('.btn-add'),
     7       subtractBtn: $('.btn-subtract'),
     8       multiplyBtn: $('.btn-multiply'),
     9       divideBtn: $('.btn-divide'),
    10       currentResultOutput: $('.current-result'),
    11       currentCalculationOutput: $('.current-calculation'),
    12     }
    13
    14     const res = {
    15       default: 0,
    16       current: 0,
    17     }
    18
    19     for (const k in $lib) l(k, $lib[k])
    20
    21     const getUserInput = () => +$lib.userInput.value
    22
    23     const createOperator = (cb) => () => {
    24       const op1 = res.current
    25       const op2 = getUserInput()
    26       const [result, process] = cb(op1, op2)
    27       const equation = `${process} = ${result}`
    28       $lib.currentResultOutput.textContent = res.current = result
    29       $lib.currentCalculationOutput.textContent = equation
    30       l(equation)
    31     }
    32
    33     const eLib = {
    34       addBtn: (o1, o2) => [o1 + o2, `${o1} + ${o2}`],
    35       subtractBtn: (o1, o2) => [o1 - o2, `${o1} - ${o2}`],
    36       multiplyBtn: (o1, o2) => [(o1 * o2).toFixed(2), `${o1} * ${o2}`],
    37       divideBtn: (o1, o2) => (o2 ? [(o1 / o2).toFixed(2), `${o1} / ${o2}`] : [o1, 'cannot di
    38     }
    39
    40     for (const k in eLib) $lib[k].addEventListener('click', createOperator(eLib[k]))
    41
```
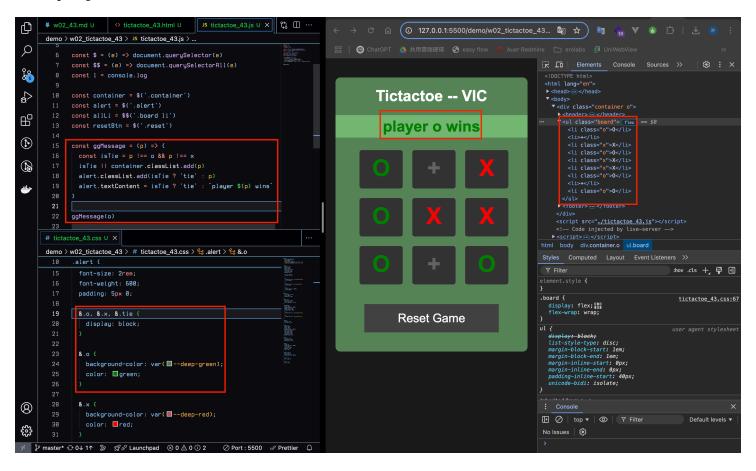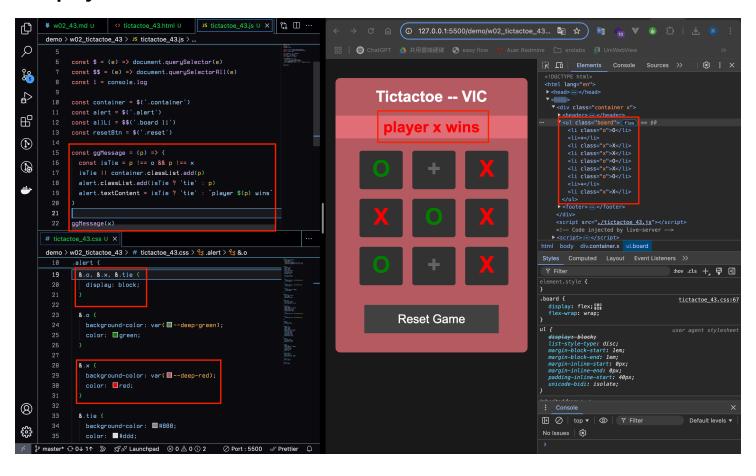
```
19f4014 victor_xu          Thu Feb 27 19:39:41 2025 +0800  W02-P1: refine the code in week
```

W02-P2: show winning message and tie message

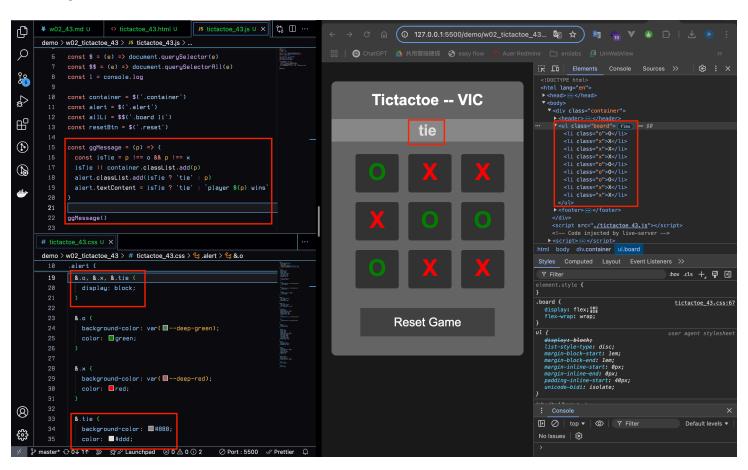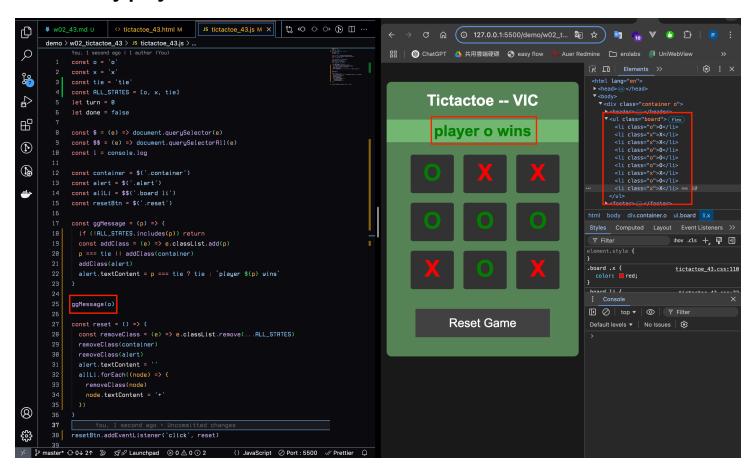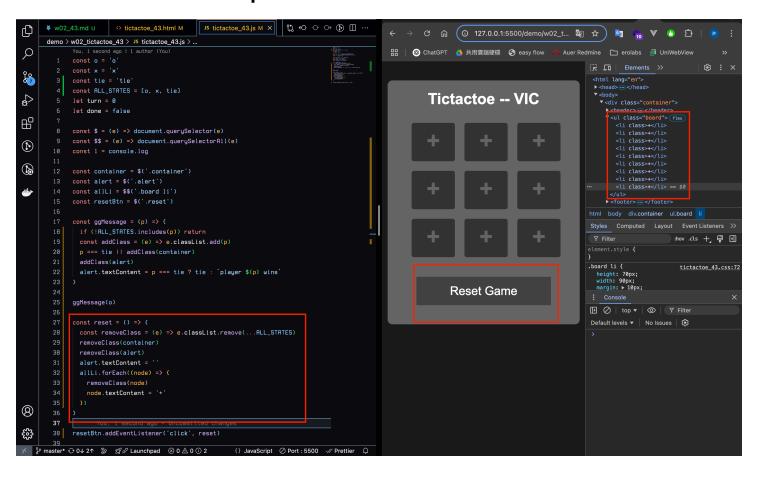## ==> play o wins

==> play x wins


```javascript
const $ = (e) => document.querySelector(e)
const $$ = (e) => document.querySelectorAll(e)
const l = console.log

const container = $('.container')
const alert = $('.alert')
const allLi = $$('.board li')
const resetBtn = $('.reset')

const ggMessage = (p) => {
  const isTie = p !== o && p !== x
  isTie || container.classList.add(p)
  alert.classList.add(isTie ? 'tie' : p)
  alert.textContent = isTie ? 'tie' : `player ${p} wins`
}

ggMessage(x)
```

```css
.alert {

  &.o, &.x, &.tie {
    display: block;
  }

  &.o {
    background-color: var(--deep-green);
    color: green;
  }

  &.x {
    background-color: var(--deep-red);
    color: red;
  }

  &.tie {
    background-color: #888;
    color: #ddd;
  }
```

Tictactoe -- VIC

player x wins

O	+	X
X	O	X
O	+	X

Reset Game

```html
<!DOCTYPE html>
<html lang="en">
<head>…</head>
<body>
  <div class="container x">
    <header>…</header>
    <ul class="board"> flex == $0
      <li class="o">O</li>
      <li>+</li>
      <li class="x">X</li>
      <li class="x">X</li>
      <li class="o">O</li>
      <li class="x">X</li>
      <li class="o">O</li>
      <li class="x">X</li>
    </ul>
    <footer>…</footer>
  </div>
  <script src="./tictactoe_43.js"></script>
  <!-- Code injected by live-server -->
  <script>…</script>
```

```
.board {                        tictactoe_43.css:67
  display: flex;
  flex-wrap: wrap;
}

ul {                          user agent stylesheet
  display: block;
  list-style-type: disc;
  margin-block-start: 1em;
  margin-block-end: 1em;
  margin-inline-start: 0px;
  margin-inline-end: 0px;
  padding-inline-start: 40px;
  unicode-bidi: isolate;
}
```

==> tie


```javascript
const $ = (e) => document.querySelector(e)
const $$ = (e) => document.querySelectorAll(e)
const l = console.log

const container = $('.container')
const alert = $('.alert')
const allLi = $$('.board li')
const resetBtn = $('.reset')

const ggMessage = (p) => {
  const isTie = p !== o && p !== x
  isTie || container.classList.add(p)
  alert.classList.add(isTie ? 'tie' : p)
  alert.textContent = isTie ? 'tie' : `player ${p} wins`
}

ggMessage()
```

```css
.alert {

  &.o, &.x, &.tie {
    display: block;
  }

  &.o {
    background-color: var(--deep-green);
    color: green;
  }

  &.x {
    background-color: var(--deep-red);
    color: red;
  }

  &.tie {
    background-color: #888;
    color: #ddd;
  }
```

Tictactoe -- VIC

tie

O	X	X
X	O	O
O	X	X

Reset Game

```html
<!DOCTYPE html>
<html lang="en">
<head>…</head>
<body>
  <div class="container">
    <header>…</header>
    <ul class="board"> flex == $0
      <li class="o">O</li>
      <li class="x">X</li>
      <li class="x">X</li>
      <li class="x">X</li>
      <li class="o">O</li>
      <li class="o">O</li>
      <li class="o">O</li>
      <li class="x">X</li>
      <li class="x">X</li>
    </ul>
    <footer>…</footer>
  </div>
  <script src="./tictactoe_43.js"></script>
  <!-- Code injected by live-server -->
  <script>…</script>
```

```
.board {                        tictactoe_43.css:67
  display: flex;
  flex-wrap: wrap;
}

ul {                          user agent stylesheet
  display: block;
  list-style-type: disc;
  margin-block-start: 1em;
  margin-block-end: 1em;
  margin-inline-start: 0px;
  margin-inline-end: 0px;
  padding-inline-start: 40px;
  unicode-bidi: isolate;
}
```

W02-P3: implement reset button

==> initially player o win

==> after reset button is pressed


```javascript
1    const o = 'o'
2    const x = 'x'
3    const tie = 'tie'
4    const ALL_STATES = [o, x, tie]
5    let turn = 0
6    let done = false
7
8    const $ = (e) => document.querySelector(e)
9    const $$ = (e) => document.querySelectorAll(e)
10   const l = console.log
11
12   const container = $('.container')
13   const alert = $('.alert')
14   const allLi = $$('.board li')
15   const resetBtn = $('.reset')
16
17   const ggMessage = (p) => {
18       if (!ALL_STATES.includes(p)) return
19       const addClass = (e) => e.classList.add(p)
20       p === tie || addClass(container)
21       addClass(alert)
22       alert.textContent = p === tie ? tie : `player ${p} wins`
23   }
24
25   ggMessage(o)
26
27   const reset = () => {
28       const removeClass = (e) => e.classList.remove(...ALL_STATES)
29       removeClass(container)
30       removeClass(alert)
31       alert.textContent = ''
32       allLi.forEach((node) => {
33           removeClass(node)
34           node.textContent = '+'
35       })
36   }
37
38   resetBtn.addEventListener('click', reset)
39
```

7ddf27d victor_xu   Thu Feb 27 21:00:25 2025 +0800   W02-P3: implement reset button

W02-logs: git logs of W02