

# 20250619hw-3project

執行結果：

<input type="text" value="100"/> <input type="text" value="+"/> <input type="text" value="50"/> <input type="button" value="計算"/> <hr/> <p>100 + 50 = 150</p>	<input type="text" value="100"/> <input type="text" value="-"/> <input type="text" value="50"/> <input type="button" value="計算"/> <hr/> <p>100 - 50 = 50</p>
<input type="text" value="100"/> <input type="text" value="*"/> <input type="text" value="50"/> <input type="button" value="計算"/> <hr/> <p>100 * 50 = 5000</p>	<input type="text" value="100"/> <input type="text" value="*"/> <input type="text" value="50"/> <input type="button" value="計算"/> <hr/> <p>100 * 50 = 5000</p>

一、js

版面、計算、結果呈現只需要一個檔案便能完成。

## 1. 版面

```
<div class="container">
  <p>
    <input type="number" name="num1" id="num1" value="100">
  </p>
  <p>
    <input type="text" name="opt" id="opt" value="+">
  </p>
  <p>
    <input type="number" name="num2" id="num2" value="50">
  </p>
  <p>
    <button type="button" id="myBtn">計算</button>
  </p>
  <hr>
  <p id="resultP">
    //計算結果
  </p>
</div>
```

## 2. 計算

```
<script>
$(document).ready(function () {
  // 1. bind
  let num1 = $('#num1');
  let opt = $('#opt');
  let num2 = $('#num2');
```

```

let myBtn = $('#myBtn');
let resultP = $('#resultP');

// 2. action
myBtn.click(function (e) {
    let num1Value = Number(num1.val());
    console.log('num1Value', num1Value);
    console.log('num1Value typeof', typeof (num1Value));
    let optValue = opt.val();
    console.log('optValue', optValue);
    console.log('optValue typeof', typeof (optValue));
    let num2Value = Number(num2.val());
    console.log('num2Value', num2Value);
    console.log('num2Value typeof', typeof (num2Value));

    // 判斷並計算結果
    let result = 0;
    switch(optValue){
        case '+':
            result = num1Value + num2Value;
            break;
        case '-':
            result = num1Value - num2Value;
            break;
        case '*':
            result = num1Value * num2Value;
            break;
        case '/':
            result = num1Value / num2Value;
            break;
        default:
            break;
    }
    resultP.text(`${num1Value} ${optValue} ${num2Value} = ${result}`);
});
});
</script>

```

## 二、form → php

需要兩個檔案才能完成。一個檔案放版面，另一個處理資料&計算並顯示結果。

計算是在後端處理的。

### 1. 檔案一 -版面

```

<div class="container">
    <form action="./calculator_02_phpResult.php" method="get">
        <p>
            <input type="number" name="num1" id="num1" value="100">
        </p>
        <p>
            <input type="text" name="opt" id="opt" value="+">
        </p>
        <p>
            <input type="number" name="num2" id="num2" value="50">

```

```

        </p>
        <p>
            <button type="submit" id="myBtn" value="submit" >計算</button>
        </p>
    </form>
    <hr>
    <p id="resultP">
        //計算結果
    </p>
</div>

```

## 2. 檔案二 -計算&呈現

```

$input  = $_GET;
$num1 = $_GET['num1'];
$opt = $_GET['opt'];
$num2 = $_GET['num2'];
$result = 0;
switch($opt){
    case '+':
        $result = $num1 + $num2;
        break;
    case '-':
        $result = $num1 - $num2;
        break;
    case '*':
        $result = $num1 * $num2;
        break;
    case '/':
        $result = $num1 / $num2;
        break;
    default:
        break;
}

```

```

<div class="container">
    <p>
        <input type="number" name="num1" id="num1" value="<?= $num1;?>">
    </p>
    <p>
        <input type="text" name="opt" id="opt" value="<?= $opt;?>">
    </p>
    <p>
        <input type="number" name="num2" id="num2" value="<?= $num2;?>">
    </p>
    <p>
        <button type="submit" id="myBtn" value="submit" >計算</button>
    </p>
    <hr>
    <p id="resultP">
        <?= $num1 . $opt . $num2 . " = " . $result;?>
    </p>
</div>

```

(需要開xampp的Apache去執行!!!)

需要兩個檔案才能完成。一個檔案放版面&計算並顯示結果，另一個處理資料。

計算是在前端處理的。

### 1. 檔案一 -版面 &計算並顯示結果

```
<div class="container">
  <form action="./c03_ajaxData.php" method="get" id="myForm">
    <p>
      <input type="number" name="num1" id="num1" value="100">
    </p>
    <p>
      <input type="text" name="opt" id="opt" value="+">
    </p>
    <p>
      <input type="number" name="num2" id="num2" value="50">
    </p>
    <p>
      <button type="submit" id="myBtn">計算</button>
    </p>
  </form>
  <hr>
  <p id="resultP">
    //計算結果
  </p>
</div>
```

&

```
<script>
$(document).ready(function () {
  // 1. bind
  let num1 = $('#num1');
  let opt = $('#opt');
  let num2 = $('#num2');
  let myBtn = $('#myBtn');
  let resultP = $('#resultP');
  const myForm = $('#myForm');

  // 2. action
  myForm.submit(function (e) {
    e.preventDefault();
    let url = './c03_ajaxData.php';
    let data = $(this).serializeArray();
    console.log('data', data);

    $.ajax({
      type: "get",
      url: url,
      data: data,
      dataType: "json",
      success: function (response) {
        console.log('response', response);
        let num1Value = Number(num1.val());
        console.log('num1Value', num1Value);
        console.log('num1Value typeof', typeof (num1Value));
      }
    });
  });
});
```

```

let optValue = opt.val();
console.log('optValue', optValue);
console.log('optValue typeof', typeof (optValue));
let num2Value = Number(num2.val());
console.log('num2Value', num2Value);
console.log('num2Value typeof', typeof (num2Value));

// 判斷並計算結果
let result = 0;
switch(optValue){
    case '+':
        result = num1Value + num2Value;
        break;
    case '-':
        result = num1Value - num2Value;
        break;
    case '*':
        result = num1Value * num2Value;
        break;
    case '/':
        result = num1Value / num2Value;
        break;
    default:
        break;
}
resultP.text(`${num1Value} ${optValue} ${num2Value} = ${result}`);
}
});
});
});
</script>

```

## 2. 檔案二 -處理資料(?)

```

$input = $_GET;
echo json_encode($input);

```