웹프로그래밍 기초(4강)



1. 변수 선언 방식(var / let)

var I = 1; // 변수 선언과 동시에 값을 초기화합니다.

let I = 2; // 지역변수 선언과 동시에 값을 초기화합니다.

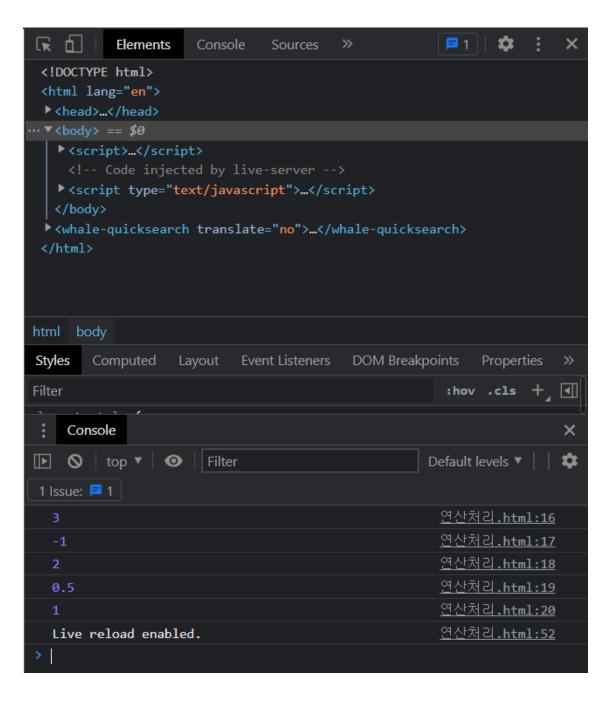
const num = 3; // 상수 변수 선언과 동시에 값을 고정시킵니다.

1. 로그 처리

```
로그를 처리할 때, 반드시 <script> </script> 태그 안에서 기록이 된다.
<body></body> 내에서 실행해보니까 잘 안된다..
예시로,
<script>
var a = 1;
let b = 10;
const c = 100;
                    => 웹브라우저 개발자 모드 콘솔창에 각각 기록되어 나옴
console.log(a);
console.log(b);
console.log(c);
</script>
```

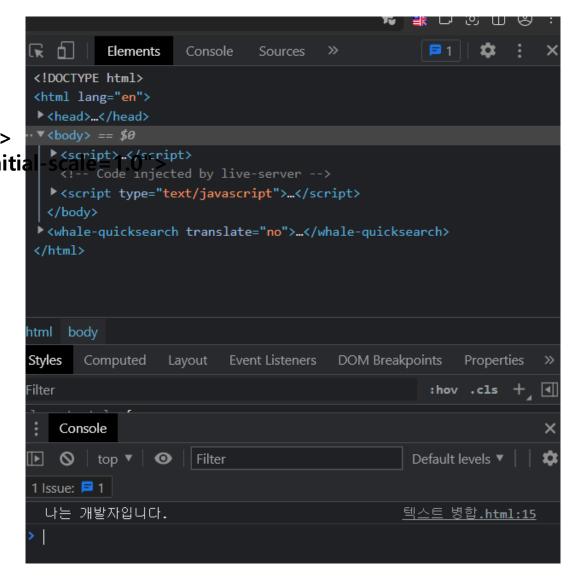
1. 연산 처리

```
<script>
var num = 1; //숫자 형식 선언
var num2 = 2;
console.log(num + num2);
console.log(num - num2);
console.log(num * num2); //곱하기 연산
console.log(num / num2); //나누기연산
console.log(num % num2); //나머지연산
</script>
```



1. 텍스트 병합

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initia</pre>
  <title>Document</title>
</head>
<body>
  <script>
     var num = '나는';
     var num2 = ' 개발자입니다.';
     console.log(num + num2);
  </script>
</body>
</html>
```



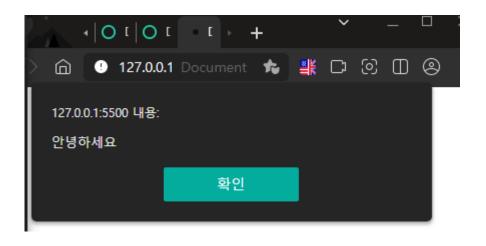
1. typeof 연습

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Document</title>
</head>
<body>
    <script>
       var num1 = 1;
       var num2 = ' 개발자입니다.';
       var num3 = '0';
       var test = num1 + num2
       var test2 = num3 + num1
       console.log(typeof num1);
       console.log(typeof num2);
        console.log(typeof num3);
        console.log(typeof test);
       console.log(typeof test2);
   </script>
</body>
</html>
```

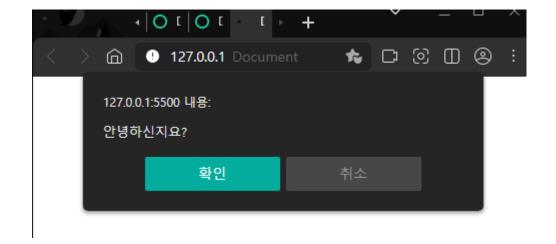
```
R 🗓
                                                       p 1
          Elements
                     Console Sources >>
<!DOCTYPE html>
<html lang="en">
 ▶ <head>...</head>
 ▼<body> == $0
  ▶ <script>...</script>
    <!-- Code injected by live-server -->
  \<script type="text/javascript">...</script>
  </body>
 ▶<whale-quicksearch translate="no">...</whale-quicksearch>
</html>
html body
       Computed Layout Event Listeners DOM Breakpoints Properties
Filter
                                                       :hov .cls +
    Console
    0
        top ▼ O
                      Filter
                                                    Default levels ▼
1 Issue: = 1
                                                       typeof.html:18
  number
  string
                                                       typeof.html:19
  string
                                                       typeof.html:20
  string
                                                       typeof.html:21
  string
                                                       typeof.html:22
```

1. 경고창 실행

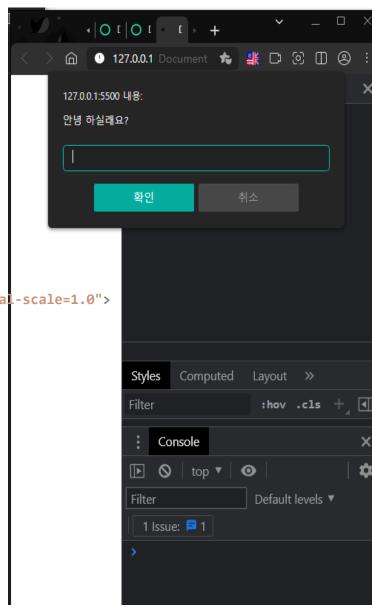
```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width,</pre>
initial-scale=1.0">
   <title>Document</title>
</head>
<body>
   <script>
        alert('안녕하세요');
   </script>
</body>
</html>
```

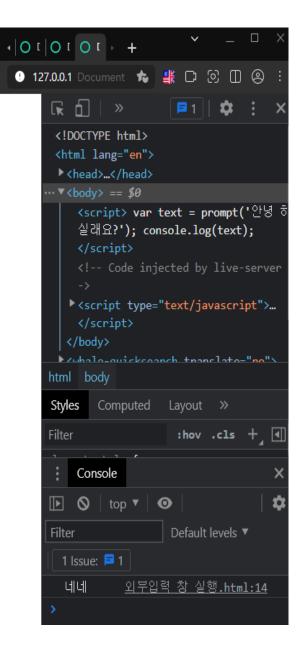


2. 물어보기 창 실행



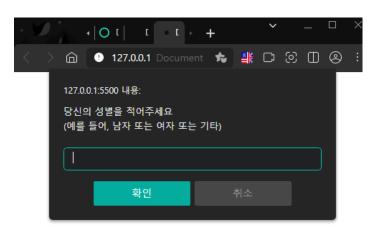
3. 외부입력 창 실행

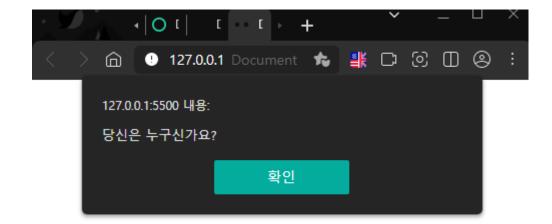




4. if문 연습

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Document</title>
</head>
<body>
   <script>
       var name = prompt('당신의 성별을 적어주세요.\n(예를 들어, 남자 또는 여자 또
는 기타)');
       if (name == '남자') {
          alert('당신은 남자입니다.');
       } else if (name == '여자') {
          alert('당신은 여자입니다.');
       } else {
          alert('당신은 누구신가요?');
   </script>
</body>
</html>
```





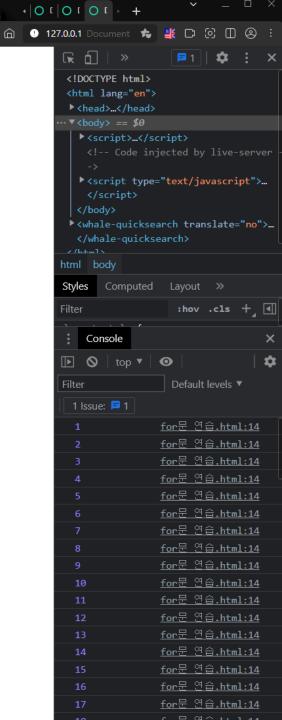
실습1

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Document</title>
</head>
<body>
   <script>
       var name = prompt('이름을 입력하세요.');
       if (name == "") {
           alert('다시 입력하세요.');
       name = prompt('이름을 입력하세요.');
       if (name != null) {
           alert(`${name}님 안녕하세요.`);
           console.log(name);
   </script>
</body>
</html>
```

```
t | O t | O t | +
                          127.0.0.1 Document 🏗
                         1
         <!DOCTYPE html>
      <html lang="en">
       \thead>...
     ...▼<body> == $0
        ▶ <script>...</script>
          <!-- Code injected by live-server
        ▶ <script type="text/javascript">...
         </script>
        </body>
       ▶<whale-quicksearch translate="no">...
        </whale-quicksearch>
      //h+m1x
     html body
             Computed
     Styles
                        Layout >>
     Filter
                         :hov .cls +
         Console
              top ▼ | ⊙
                        Default levels ▼
     Filter
       1 Issue: 📁 1
        손영식
                           실습1.html:25
```

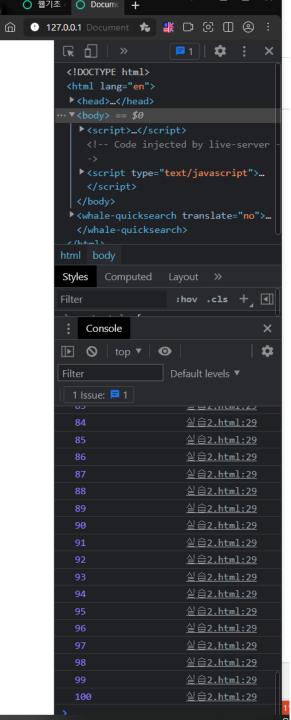
4. for문 연습

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-</pre>
scale=1.0">
    <title>Document</title>
</head>
<body>
    <script>
        for (var i = 1; i <= 100; i++) {
            console.log(i);
    </script>
</body>
</html>
```



실습하기 2

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Document</title>
</head>
<body>
   <script>
       var num = Number(prompt("숫자를 입력해주세요."));
       if (num == '') {
           alert('숫자를 입력해 주세요.');
       num = Number(prompt("숫자를 입력해주세요."));
       if ((num < 1 | | num > 100)) {
       } alert('1이상 100이하를 넣어주세요.');
       num = Number(prompt("숫자를 입력해주세요."));
       if (num >= 1 && num <= 100) {
           for (var i = 1; i <= 100; i++) {
               console.log(i);
           alert('완료되었습니다.');
   </script>
</body>
</html>
```

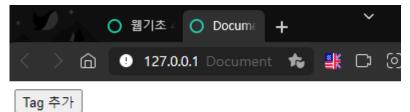


document.write("<h1> 제목입니다. </ h1>");

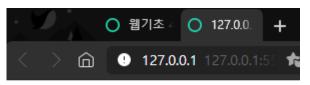
document.write(" 내용입니다. .");

document.write("<div class='test'> 클래스도? </ div>.");

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Document</title>
</head>
<body>
   <script>
       function addTag() {
           document.write('<h1> hello world</h1>');
   </script>
    <button onclick="addTag()">Tag 추가/button>
   <div onclick="addTag()">Tag 추가 div 방식으로</div>
</body>
</html>
```

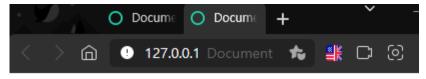


Tag 추가 div 방식으로 Tag 추가 div 클래스 방식으로 방식으로



클래스도?

```
var id = document.getElementById("id_name");
<!DOCTYPE html>
<html lang="en">
                                                                   var classes = document.getElementsByClassName("class_name");
<head>
        <meta http-equiv="X-UA-Compatible" content="IE=edge">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
       <title>Document</title>
</head>
<body>
        <script>
                 function addTag() {
                         document.write('<h1> hello world</h1>');
                 function addClassTag() {
                         document.write('<div class= "test">클래스도?</div>');
                 function test() {
                        var a = document.getElementById('test');
                         a.style.color = "#00ff00"
                 function test2() {
                         var b = document.getElementById('test2')
                         b.className = "test";
                 function test3() {
                        var c = document.getElementsByClassName('class00')
                         c.id = "testtest";
        </script>
        <div onclick="test()">test 아이디 내에 내용 꺼내기</div>
        <h1 id="test">hello</h1>
        <div onclick="test2()">classname 내에 클래스명을 test2에서 test3으로 바꾸기</div>
        <h2 id="test2">h2h2</h2>
        <div onclick="test3()">클래스 이름에서 id이름으로 추가함</div>
        <h3 class="class00">h3h3</h3>
        <br/>
<br/
        <div onclick="addTag()">Tag 추가 div 방식으로</div>
        <div onclick="addClassTag()">Tag 추가 div 클래스 방식으로 방식으로</div>
        <script>
                function a() {
                         let aa = document.getElementById('innerHTML');
                         aa.innerHTML = "<h1>hello world</h1>";
        </script>
        <button id="innerHTML" onclick="a()">innerHTML</button>
</body>
</html>
```



test 아이디 내에 내용 꺼내기

hello

classname 내에 클래스명을 test2에서 test3으로 바꾸기

h2h2

클래스 이름에서 id이름으로 추가함

h3h3

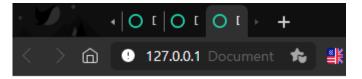
Tag 추가

Tag 추가 div 방식으로 Tag 추가 div 클래스 방식으로 방식으로

hello world

```
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
      let text = prompt('텍스트 값을 입력해주세요.');
      if (text == "") {
         alert('텍스트값을 입력해 주세요.');
      } else if (text != "") {
         function red() {
         alert('빨강색으로 변경됩니다.');
         let red = document.getElementById('빨감');
         red.style.color = "#ff0000";
         alert('색이 변경되었습니다.');
      function blue() {
         alert('파랑색으로 변경됩니다.');
         let blue = document.getElementById('파함');
         blue.style.color = "#3333ff";
         alert('색이 변경되었습니다.');
      function green() {
         alert('초록색으로 변경됩니다.');
         let green = document.getElementById('조록');
         green.style.color = "#339966";
         alert('색이 변경되었습니다.');
   <button id="빨감" onclick="red()">빨감</button>
   <button id="파랑" onclick="blue()">파랑</button>
   <button id="조록" onclick="green()">조록</button>
```

실습하기 - 4



안녕하세요

빨강 파랑 초록

VSCode 내용

크롬 구현 화면

```
body {
       width: 100%;
    .items {
       width: 100%;
       position: absolute;
      top: 40%;
      text-align: center;
   #printField {
      text-align: center;
       font-size: 50px;
   #butonField {
      text-align: center;
<div class="items">
   <span id="printField" align="center"> </span>
   <div class="buttonField" align="center">
       <button id="red" onclick="turnRed()">빨강</button>
      <button id="blue" onclick="turnBlue()">파랑</button>
      <button id="green" onclick="turnGreen()">초록</button>
   let input = prompt('텍스트를 입력해주세요');
   if (input == null || input == '') {
      alert('텍스트를 입력해주세요');
       document.getElementById('printField').innerText = input;
   function turnRed() {
       alert('빨간색으로 변경됩니다');
       document.getElementById('printField').style.color = 'red';
   function turnBlue() {
      alert('파란색으로 변경됩니다');
       document.getElementById('printField').style.color = 'blue';
```

VSCode 내용

실습하기 – 4 집에서 구글링해서 다시 해보기



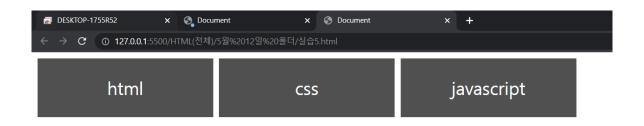


크롬 구현 화면

```
text-align: center;
        justify-content: center;
        align-items: center;
       width: 300px;
        height: 100px;
       background-color: white;
        border: 1px solid □black;
        color: ■black;
        font-size: 30px;
   #html {
        position: absolute;
        top: 10px;
        left: 10px;
       position: absolute;
       top: 10px;
       left: 320px;
   #javascript {
       position: absolute;
       top: 10px;
       left: 630px;
       font-size: 30px;
<div class="button" id="html" onclick="changeHtml()">html</div>
<div class="button" id="css" onclick="changeCss()">css</div>
<div class="button" id="javascript" onclick="changeJs()">javascript</div>
   function changeHtml() {
       document.getElementById('html').className = 'click'
        document.getElementById('css').className = 'button'
        document.getElementById('javascript').className = 'button'
   function changeCss() {
       document.getElementById('css').className = 'click'
       document.getElementById('html').className = 'button'
        document.getElementById('javascript').className = 'button'
   function changeJs() {
        document.getElementById('javascript').className = 'click'
        document.getElementById('html').className = 'button'
        document.getElementById('css').className = 'button'
```

VSCode 내용

실습하기 - 5 잘하시는 분꺼 참고했어요!



크롬 구현 화면

실습하기 - 6 잘하시는 분꺼 참고했어요!

```
(!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
           text-align: center;
           justify-content: center;
           align-items: center;
           width: 300px;
           background-color: ☐rgb(80, 80, 80);
           color: ■white;
           font-size: 30px;
           display: flex;
           text-align: center;
           justify-content: center;
           align-items: center;
           width: 300px;
           height: 100px;
           background-color: white;
           color: □black;
           font-size: 30px;
           position: absolute;
           left: 10px;
           top: 10px;
           left: 320px;
       #javascript {
           position: absolute;
           font-size: 30px;
```

```
width: 300px;
       height: 100px;
       background-color:  white;
       border: 1px solid □black;
       color: □black;
       font-size: 30px;
       position: absolute;
       top: 10px;
       left: 10px;
   #css {
       position: absolute;
       left: 320px;
   #javascript {
       left: 630px;
       font-size: 30px;
<div class="button" id="html" onmouseover="changeHtml()">html</div>
<div class="button" id="css" onmouseover="changeCss()">css</div>
<div class="button" id="javascript" onmouseover="changeJs()">javascript</di>
   function changeHtml() {
       document.getElementById('html').className = 'click'
       document.getElementById('css').className = 'button'
       document.getElementById('javascript').className = 'button'
   function changeCss() {
       document.getElementById('css').className = 'click'
       document.getElementById('html').className = 'button'
       document.getElementById('javascript').className = 'button'
   function changeJs() {
       document.getElementById('javascript').className = 'click'
       document.getElementById('html').className = 'button
       document.getElementById('css').className = 'button'
```

