

Javascript

In-class exercise 7

1. W3C school (<https://www.w3schools.com/>)
2. Syntax

```
<script>
<!--
document.write("<h1 style= 'color:red;'>");
document.writeln("Welcome to JavaScript " +
    "Programming!</h1>");
//-->
</script>
```

- Use <script> tag.
- Always ends with ;
- HTML comment code (<!--comment-->) also works.
- Be careful with reserved words. (https://www.w3schools.com/js/js_reserved.asp)
- Be careful with ' and ".

JavaScript validator: <http://www.jshint.com/>

Define and use variables and objects:

```
var num, name;
```

Output

alert dialog:

```
window.alert("Welcome to JavaScript Programming!");
```

Input

prompt dialog to receive user input:

```
window.prompt("Please enter your name:");
```

Assignment operators:

`+= -= *= /= %=`

`x /= 2` → `x = x/2`

Increment and decrement operators: `a++ ++a a-- --a`

JavaScript Global Properties: NaN, undefined

Global Functions:

parseInt(s): Parses string s and returns an integer

parseFloat(s): Parses a string and returns a floating-point number

eval(s): Evaluates strings and executes it as if it was script code

Number object method:

toFixed(x) formats a number with x numbers of digits after the decimal point

```
if (condition1) {  
    // Code  
} else if (condition2) {  
    // Code  
} else {  
    // Code  
}
```

(0) Create following layout by html and CSS.

My Calculator

Result:

Input:

Clear	()	
1	2	3	+
4	5	6	-
7	8	9	×
.	0	=	÷

(1) While pressing any button other than “=” and “Clear”, the calculator should show corresponding input in the input section.

My Calculator

Result:

Input: (25)*6-9

Clear	()	
1	2	3	+
4	5	6	-
7	8	9	×
.	0	=	÷

(2) While pressing the “=” button, the calculator should show answer in the result section.

My Calculator

Result: 141

Input: (25)*6-9

Clear	()	
1	2	3	+
4	5	6	-
7	8	9	×
.	0	=	÷

(3) While pressing the “=” button, the calculator should show answer in the result section.

(4) While pressing the “Clear” button, the calculator should clear all inputs and results.

(5) Add a button “Check my result” under your calculator:

My Calculator

Result:

Input:

Clear	()	
1	2	3	+
4	5	6	-
7	8	9	×
.	0	=	÷
Check My Result			

- (6) While pressing the “Check my result” button, the calculator should check your result and show whether the result is “no result yet”, “positive”, “negative”, or “zero”. Moreover, if the number is positive and a multiple of three, the calculator should check your result and show “Positive (3)”. You are required to use switch to finish this one.

My Calculator

Result: No result yet

Input:

Clear	()	
1	2	3	+
4	5	6	-
7	8	9	×
.	0	=	÷
Check My Result			

My Calculator

Result: Positive

Input: 88

Clear	()	
1	2	3	+
4	5	6	-
7	8	9	×
.	0	=	÷
Check My Result			

My Calculator

Result: Negative

Input: 5-99

Clear	()	
1	2	3	+
4	5	6	-
7	8	9	×
.	0	=	÷
Check My Result			

My Calculator

Result: Zero

Input: 5-5

Clear	()	
1	2	3	+
4	5	6	-
7	8	9	×
.	0	=	÷
Check My Result			

My Calculator

Result: Positive (3)

Input: 5*36

Clear	()	
1	2	3	+
4	5	6	-
7	8	9	×
.	0	=	÷
Check My Result			

- (7) Rename the finished webpage “Exercise7” and zip the file. Upload the zip file to your moodle.