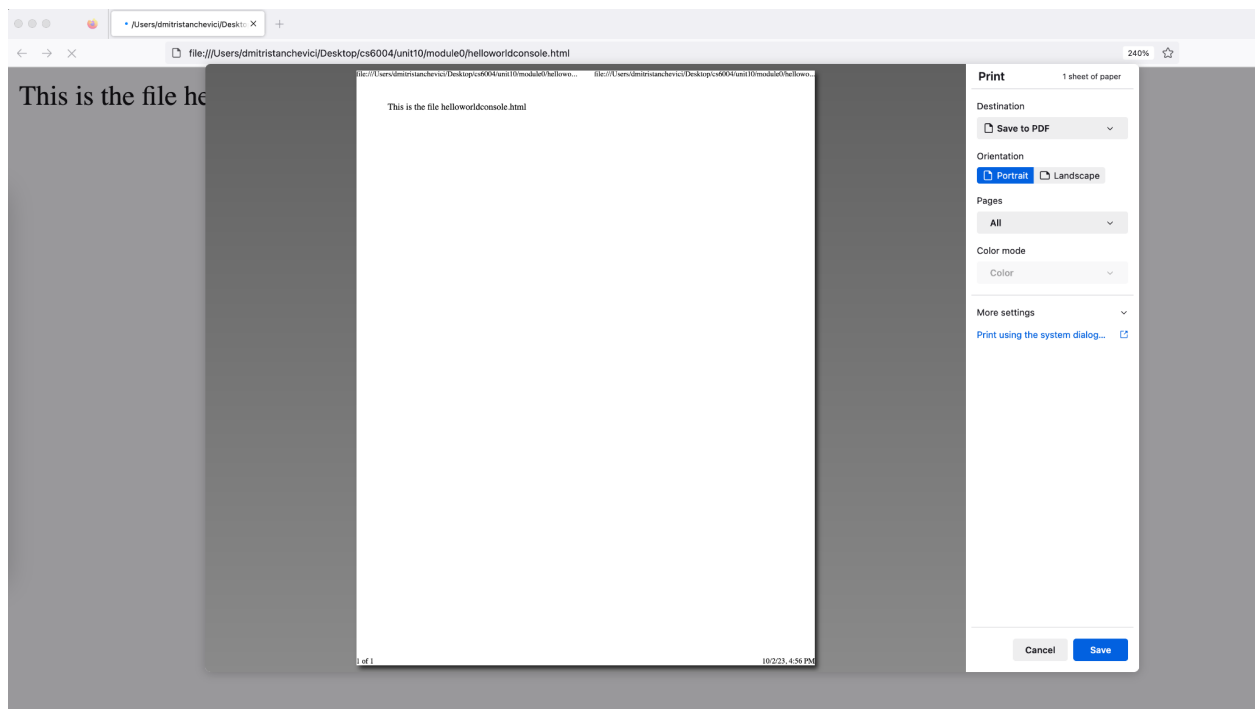Dmitri Stanchevici
Unit 10
Module 0

# Ex. 0.1

When I remove the console part of the browser and open the file, I see this in the browser:

This is the file helloworldconsole.html

After uncommenting the print statement, in helloworldconsole.js, I see this:

# Ex. 0.2



# Ex. 0.3

JavaScript was developed for Netscape by Brendan Eich in the half of the 1990s. Netscape desired a scripting language embedded in Netscape Navigator, the most popular web browser at the time. This scripting language was supposed to make webpages, which had hitherto been static, dynamic, allowing users to get webpages to react to actions like clicking or hovering the mouse or to textual input. After several initial names, Eich called the language JavaScript, a name that was supposed to attract attention by association with Java, a "hot" programming language at the time. Despite the common word "Java" in their names and despite JavaScript's use of some of Java's syntactic features (like the use of curly brackets), Java and JavaScript are different languages. The embedding of JavaScript into various browsers required standardization. Netascape submitted JavaScript to ECMA, an international standards organization. Today's standard for JavaScript is called ECMAScript, and its latest version was released in 2021.

# Ex. 0.5

Changing "5" to "five" results in

```
z=five2 w=NaN
```

It is obvious that both "5" and "five" are treated as strings. Placing the "+" operator between a string ("5" or "five") and a number (2) converts the number variable into a string too concatenates these two strings. Thus "5" + 2 evaluates to "52," while "five" + 2 to "five2."

Placing the "-" between "five" and 2 is unacceptable, resulting in "NaN." However, placing "-" between the string "5" and the number 2 converts "5" into the number 5 and thus evaluates to 3.

# Ex. 0.7
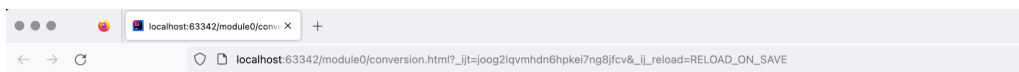
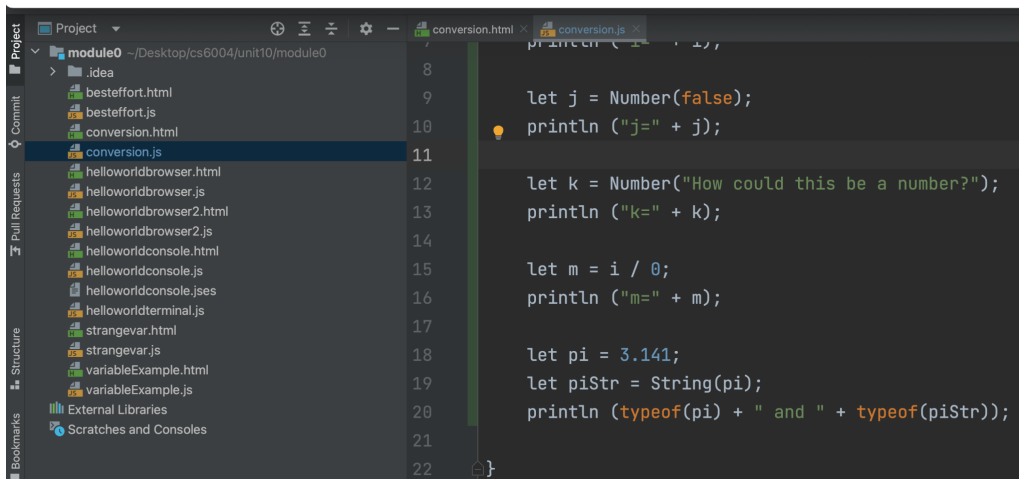With **x = 1** commented out, the output is

```
undefined
2
5
4
```

With **let y = 3** uncommented, the output is

```
undefined
```

# Ex. 0.8



```
i=43
j=0
k=NaN
m=Infinity
number and string
```

# Ex. 0.9

Browser output:

```
Run

str=I don't like sentences that end abrup
str.length=37
subStr(2,12)=don't like
indexOf("like")=8
str.slice(-1)=p
str2= Whatever
str3=whatever
str4=W
[don't like] equals [don't like]
```

Code (stringExample.js):

```javascript
3    // WRITE YOUR CODE HERE
4    let str = "I don't like sentences that end abrup";
5    println("str=" + str);
6    let len = str.length;
7    println("str.length=" + len);
8    let subStr = str.slice(2,12);
9    println("subStr(2,12)=" + subStr);
10   let x = str.indexOf("like");
11   println("indexOf(\"like\")=" + x);
12   let y = str.slice(-1);
13   println("str.slice(-1)=" + y)
14
15   let str2 = " Whatever      ";
16   println("str2=" + str2);
17   let str3 = str2.trim().toLowerCase();
18   println("str3=" + str3);
19   let str4 = str2.charAt(1);
20   println("str4=" + str4);
21
22   let str5 = "don't like";
23   if (subStr == str5) {
24       println("["+ subStr + "] equals [" + str5 + "]");
25   }
26   else {
27
```

# Ex. 0.10

Browser output:

```
Run

x == y is true
x === y is false
```

Code (stringEquals.js):

```javascript
2    function run() {
3        let x = 42;
4        let y = "42";
5
6        if (x == y) {
7            println("x == y is true");
8        }
9        else {
10           println("x == y is false");
11       }
12
13       if (x === y) {
14           println("x === y is true");
15       }
16       else {
17           println("x === y is false");
18       }
19   }
20
21   ///////////////////////////////////////////////
22   // Useful print functions similar to Java's Syst
23
24   function print (outputStr)
```
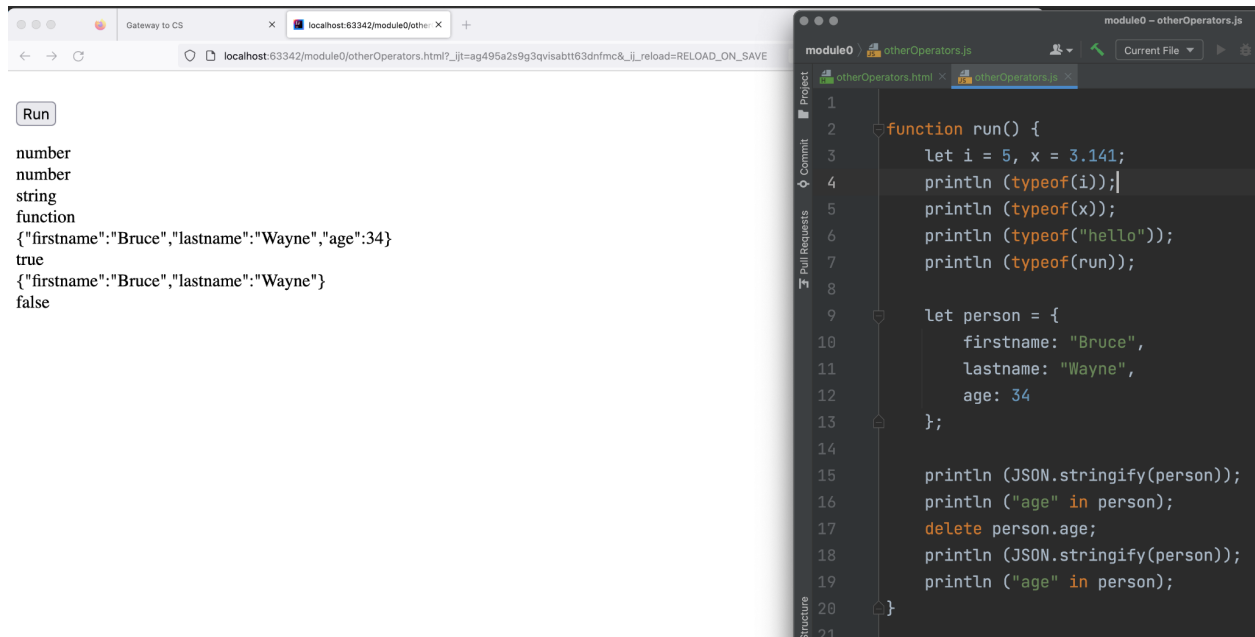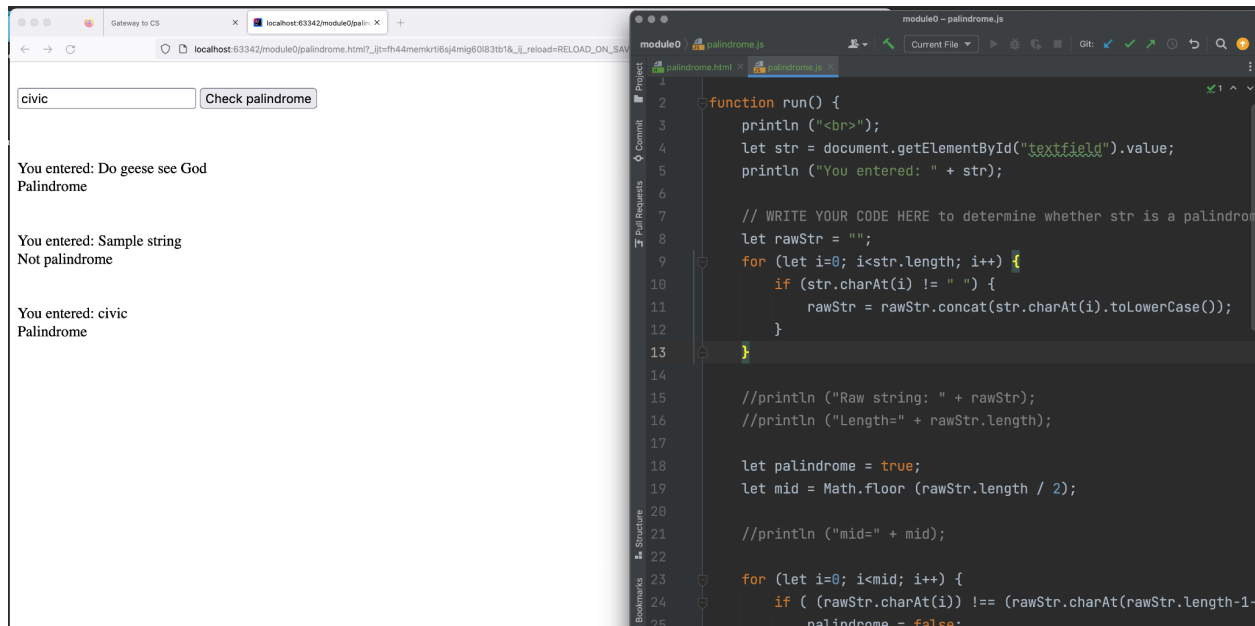
# Ex. 0.11



# Ex. 0.12

Using an assignment in an if-expression is acceptable. The output of

```
if (i = 4) {
    println ("Four");
}
```

is

```
Four
```

# Ex. 0.13



# Ex. 0.14

```
i=7 j=22
```

# Ex. 0.15

Printed is

```
k=4
batman
```

# Ex. 0.16

Printed is

```
We have 4 of banana
And 5 of apple
#fruits=4 first=banana last=pear
apple
kiwi
```

# Ex. 0.17

Printed is

```
Tarzan debuted in 1912
Zorro debuted in 1919
{"name":"Sheena","debut":1937}
```