

JavaScript Lab1

(This lab is for deeply understand the language, try all code blocks and discuss the code with your lab instructor)

- 1- Create your first html file that contains any html tags.
- 2- Create an external JavaScript file and name it `External.js` ,then define the following variables in this file
 - a- Three number variables (`number1,number2,number3`) with different values (3,2.9,0xff)

Note: define numbers with `var` Your `firstName` ,`middleName` and `lastName` variables

Note: define `firstName` with `"` , `middleName` with `'` and `lastName` with ```(backtick).

- b- Define an array that holds different numbers and strings then name it `numbers`
 - c- Define a `flag` variable with value `true`
 - d- Finally print on log "This is the External JavaScript file"

- 3- Try the following assignments and write your comment
 - a- On `External.js` ->print the value of `number1` on console before `number1` definition line ?!
 - b- Create another internal script before external script in html and print the value of `number1`?
 - c- Now add another internal script after `external.js` script in html file and print the same value?

- d- **WHAT IF** you remove var keyword from number1 definition and repeat the previous 3 steps , does the result change?
 - e- Try to change the value of number1, number2 or number 3 on developer tool console? What will happen???
 - f- Try to change your firstName character at index 3
 ,firstName[3]='A'
 Then print firstName variable on console.
 - g- Print **typeof** all your variables
- 4- Now inside the html create an embedded script tag , then apply the following assignments and print the result on console (console.log function)
- a- Summation of number1 and number2
 - b- Summation of number1 and array
 - c- Summation of flag and number2
 - d- Summation of firstName and flag
 - e- Summation of number1 and firstName
 - f- Multiplication of number1 and flag
 - g- Divide number1 and latName
 - h- Print your full Name with firstName , middleName and lastName variables with string template and backtick (**ES6**).
 - i- Display all array values on console as table
 - j- Display Numbers array but each number should be multiplied by 5
 Then display only values that greater than 20 from resulted array

Studying: Operators on Day1 PDF file

Searching:

- 1- in ES5 we can avoid define variable without var keyword by using 'use strict' mode !
- 2- all number variables have a method called toString
var number=30;
number.toString(16);
what does this method do ?