

## 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 number1 with `var` , number2 with `let` and number3 with `const`.

- b- Your `firstName` ,`middleName` and `lastName` variables

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

- c- Define an array that holds different numbers and name it `numbers`
  - d- Define a `flag` variable with value true
  - e- 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?

**NOTE:** Try the same 3 steps for number2 and number3

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 numbers 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

j- Display Numbers array but each number should be multiplied by 5

Then display only values that greater than 20 from resulted array

**read operators section in the power point presentations.**