**JavaScript**

-Create JavaScript file with **js** extension

Ex: app.js

- comments

// comment

or

/\*…..

Comments

…\*

-variables

To store and retrieve information

- declare variable

Ex: let name

-initialization

Ex: name = ’Aria’

-print on console

Ex: console.log(name)

-declaration and initialization

Ex: let dob = ’Sep 15’

* Declaration using const
  + const keyword 🡺 variable can’t be changed after declaration
* developer tools on the browser
  + you can see errors, warning and information on **console**
  + also, you can choose to view on category, for example error only, warning only
* run JavaScript on console using node command
  + **Ex: node app.js**
* other commands:
  + - pwd 🡪 print working directory
    - ls 🡪 list files in directory

**Data Types:**

-number 🡪 integer 1,2,3

-floats 🡪 decimals 2.455

-strings 🡪 ”23”, “Hello world!”

-boolean 🡪 True, False

Ex:

let integer = 1;

let float= 2.4446

let string = “hello world!”

let boolean = true;

let boolean2= false;

**Check Operators:**

* **<**  less than
* **=**  assignment operator
* **>**  greater than
* **==** comparison between values
* **!** converts false to true, true to false
* **!**= not equal 🡪 compare values
* **>=**  greater than or equal
* **<=** less than or equal
* **===**  compare value and type
* **!==** not equal 🡪 compare value and type

**Mathematical operator**

* **+** adding numbers, or concat two strings

**Ex:**

console .log (name + ‘ is born on’ +

dob)

**console.log (4+5) 🡪 9**

**console.log (23 + +"23") 🡪 46**

**console.log (23 + "23") 🡪 2323**

* - subtract
* \* Multiply
* / Divide
* % Remainder

Ex:

**console.log (23 % 23) 🡪 0**

**console.log (7 % 2) 🡪 1**

**Logical Statements:**

* if 🡪 execute block of code only if the condition is true

Ex: if today equals to dob in both value and type,

so it the block of code **will be executed**

Text

Description automatically generated

* if today not equal to dob in both value and type,

the block of code **will not be executed**

Text

Description automatically generated

**Students’ Questions**:

* Difference between let and var => var is old way
* Print before initialization 🡺 it gives undefined on terminal.
* How to put “” inside the text 🡺 let txt = ‘some “text”, can also be/include numbers like 23’Text

  Description automatically generated
* What is the result if we exchange left side and right side using single or double quote

console.log (24.0 == "24")

console.log ('24.0' == 24)

console.log (24.0 == "24.0”)

all of them true

but if we compare between value and type

console.log(24.0 === "24.0”) false