Objects & Methods:

- An object is made up of **properties** (which store values) and **methods** (which are functions inside the object that perform actions).
- Properties hold data, while methods define behaviors.

Statement:

- if Statement → Runs code if a condition is true.
- else Statement → Runs code if if is false.
- switch Statement → A cleaner way to check multiple cases (switch(expression) { case 1: ... })

Loops:

- while Loop → Repeats while a condition is true.
- do while Loop → Runs at least once, then repeats if condition is true.
- for Loop → Runs a set number of times (for (let i = 0; i < 10; i++) {})
- for...in & for...of Loops → Loops through objects (for...in) or arrays (for...of).
    - For…in : conteur ye5edh el indice mte3 array, great for parcourir
    - For…of : conteur ye5eth les valeurs (les elements) mte3 cells mte3 el array.
        - Doesn’t need length-1, because it knows it needs to iterate the values and therefore, it doesn’t need borne sup.
        - The index takes the values of the cells.

Breaks:

- Break & Continue → break stops a loop, continue skips an iteration.

Array:

- **.push** adds elements to the end of the array.
- **.unshift** adds elements to the beginning of the array.
- **.pop** removes the last element from the array and returns it.
- **.shift** removes the first element from the array and returns it.

1. String Methods

Method	Description
`toString()`	Converts to string
`toUpperCase()`	Converts to uppercase
`toLowerCase()`	Converts to lowercase
`trim()`	Removes whitespace from both ends
`split(separator)`	Splits string into an array

2. Array Methods

Method	Description
`toString()`	Converts array to string
`join(separator)`	Joins array into a string
`push(value)`	Adds element to end
`pop()`	Removes last element
`shift()`	Removes first element
`unshift(value)`	Adds element to start
`slice(start, end)`	Returns part of array
`splice(start, deleteCount, ...items)`	Adds/removes elements
`concat(array2)`	Merges arrays
`reduce(callback, initialValue)`	Reduces array to single value
`reverse()`	Reverses array order

3. Number Methods

Method	Description
`toString()`	Converts number to string
`toFixed(digits)`	Formats to fixed decimal places
`toPrecision(digits)`	Formats to specific precision
`parseInt(string)`	Converts string to integer
`parseFloat(string)`	Converts string to float

4. Object Methods

Method	Description
`Object.keys(obj)`	Gets an array of keys
`Object.values(obj)`	Gets an array of values
`Object.entries(obj)`	Gets key-value pairs as arrays

MATH Methods:

`Math.max(a, b, c)`	Returns max value
`Math.min(a, b, c)`	Returns min value
`Math.pow(base, exp)`	Exponentiation
`Math.sqrt(x)`	Square root