**JS basics**

**Alzero js playlist (1-85)**

**#var , const ,let**

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AI-generated content may be incorrect.**Note : const,let in ES6**

# \ Escape

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#Concatination

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#Templeat Literals (template String )

We make the string template by using Backticks ``

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قبل ال

Es6

كانت فكرة انو اعمل نص مكون من اكثر من سطر تحتاج استخدم

Concatenation +

واذا بدي استخدم مثلا احدي االرموز الخاصة " اضطر اعملها

Scape

فالموضوع كان معقد شوي

فال es6

جابت اشي اسمه

String literals

ليسهل فكرة انشاء نص من اكثر من سطر

مقارنة نفس الكود ياستخدام

String template

وبدونه

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#Arithmetic operators

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#Assigment Operator

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#Number Method

Two dot to call amethod

اذا استخدمنا نقطة واحدة الكومبايلر حيعتبر اللي بعدها كانه منازل عشرية وهاد خطا لهيك نضيف نقطتين لاستدعاء الدالة لالخاصة بال

number



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parseInt()

اذا كتبنا داخله اول شي عدد وبعدها سترنج بيشوف العدد بس وبطبعه لكن لو كتبنا العكس سترنج وبعدها عدد اول ما حيشوف السترنج فحيرجع

NAN

#Math methods

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#String Methods

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Slice,substr => بتفهم انواذا حطيت الاندكس سالب يعني انو تبلش عد من اخر النص

Slice=> have more than one case

Take positive index or negative index =>

Take the start index only and the end index automatically will become to the string end .

Take the start and end index

Substr()=> have more than one case

Take positive index or negative Index =>

Take the start index only and the end index automatically will become to the stringEnd .

Take the start index and the length of the substring

substring()=> اذا حطيت الاندكس سالب حتعتبر انه صفر ما بتبلش تعد من اخر النص

Take positive index =>

Take the start index only and the end index automatically will become to the string end .

Take the start and end index

Take negative index => the negative index mean 0

#Comparison Operator

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#Logical Operator

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# if Conditions

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Ex:  
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A screen shot of a computer program

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#Swich conditions

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#Array

A computer screen with text and images

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Array Method

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Output:

Line12=>0

Line13=>-1

Line15=>4

Line16=>0

Line18=>true

Line19=>true

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Concat() join all array in one array and return it

Join() join the array in one string with (, )sperator by default or another sperator , return string .

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#Loops for ,while,do while

Loop label

انو بحط مثلا للوب الخارجي اسم والنيستيد اسم وداخل اللوب الداخلي بعمل بريك من اللوب الخارجي

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Ex:

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#Functions

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Function with reset parameter

Reset parameter is aparameter with array type declear using three (.),using when we don’t know the parameter count which function take it .

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**#spreed operator**

**Spread Operator (...) يُستخدم في JavaScript في عدة مواقف، وكل موقف خليني أشرح لك متى ولماذا نستخدمه بطريقة سهلة:**

**✅ 1. عند تمرير مصفوفة كعناصر منفصلة إلى دالة**

**بعض الدوال (مثل Math.max) لا تقبل مصفوفة، بل تريد أرقامًا مفصولة.**

**مثال:**

**js**

**CopyEdit**

**const arr = [3, 5, 1];**

**console.log(Math.max(...arr)); // ✅ Output: 5**

**✅ 2. عند نسخ مصفوفة أو كائن (copy)**

**const a = [1, 2, 3];**

**const b = [...a]; // نسخ بدون ربط بين a و b**

**const user = { name: 'Raghad', age: 25 };**

**const copy = { ...user };**

**✅ 3. عند دمج مصفوفتين أو أكثر**

**const a = [1, 2];**

**const b = [3, 4];**

**const merged = [...a, ...b]; // [1, 2, 3, 4]**

**✅ 4. عند تحويل string إلى مصفوفة من الأحرف**

**const word = "Raghad";**

**const letters = [...word]; // ['R', 'a', 'g', 'h', 'a', 'd']**

**✅ 5. عند تمرير عناصر دالة داخل array**

**مثلاً عندك دالة:**

**function sum(a, b, c) {**

**return a + b + c;**

**}**

**const nums = [2, 4, 6];**

**console.log(sum(...nums)); // 12**

**✨ تلخيص سريع:**

| **الحالة** | **نستخدم Spread (...) عندما:** |
| --- | --- |
| **تمرير عناصر مصفوفة كوسائط** | **Math.max(...arr)** |
| **نسخ مصفوفة أو كائن** | **let b = [...a]** |
| **دمج مصفوفات** | **[...arr1, ...arr2]** |
| **تفكيك سترينغ إلى أحرف** | **[...'Raghad']** |
| **تمرير وسائط لدالة** | **myFunc(...params)** |

**🎓 الفرق بين Spread و Rest:**

| **اسم** | **الشكل** | **يستخدم لـ** |
| --- | --- | --- |
| **Spread** | ...arr | **عند التفكيك**: نشر عناصر مصفوفة داخل مكان يتطلب عناصر منفصلة |
| **Rest** | ...args | **داخل الدالة**: تجميع كل الوسائط في مصفوفة |

**🧠 مثال توضيحي للفارق:**

function show(...args) {

console.log(args); // Rest → يجمع الوسائط في مصفوفة

}

const arr = [1, 2, 3];

show(...arr); // Spread → ينشر المصفوفة كعناصر منفصلة

#Anonymous FunctionA computer screen with text

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بنستخدمه لما بدنا نعمل فنكشن نريد استخدامها لمرة واحة ما بتتكرر يعني مثلا بدنا لما المستخدم يضغط على زر ما ينفذ دالة معينة هون ما بلزم نعطي اسم للدالة شو الهدف من الأسم!!و كمان

High order function ()

بتاخذ دالة كبراميتر فهون بعمل

Anonymous Function

بدون اسم .

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#Hight Order Function

map(),filter().reduce(),foreach() video(71-78) jsElzero

# Object

Object is structure consist from property and methods

Ex:

person is object hase property as name ,age ,Birthday…, and make methods as sleep,work,play ets ..

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To access the object property if the property identifier without "" we can use dot notation or Bracket notation, but if the property identifier using "" we can access it by using only the brackets Notation.

The best practices is using the Dot Notation with the valid Property .

## Nested Object

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##add new property to exist object

2 method :

1-using Dot Notation .

2-using brackets Notation.

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Add anew function A computer screen with text

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## create objext using new keyword

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#This keyword

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