

① # ~~7~~ String in JavaScript

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- Escape character
- Finding String in a String
- Searching for String in a String
- Extracting String Parts
- Replacing String Content
- Extracting String character
- Other useful Method

1 String in JavaScript

If string is zero or more characters written inside quotes.

- JavaScript strings are stored and manipulating ^(changes) text.
- You can use single quotes or double quotes
- ★ • String can be created on primitives, from string literals, or as objects, using the String() constructor.

```
let myName = "Moteullah Armi";  
let myChannelName = 'Armi Web3';
```

★★

```
// let ytName = new String ("Armi Dev")
```

```
console.log(myName); ⇒ Moteullah Armi
```

```
console.log(ytName); ⇒ [string: 'Armi Dev'  
Armi Web3']
```

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⇒ Length()

Reflect the length of String.

let myName = "Aruni";

console.log(myName.length); ⇒ 5

(अनुप्रास)

1. Escape character

Backslash Escape

It turns special character into String character.

Code	Result	Description
\'	'	Single - quotes
\"	"	Double - quotes
\\	\	Backslash

Escape character

If you not used mess, then apply alternates quotes.

let mySentence = "Welcome to 'Aruni' World".

or

let mySentence = 'Welcome to "Aruni" World'.

2. Finding a String in a String

a) indexOf (searchValue [, fromIndex]) (Forward)

The indexOf() method returns the index of (the position of) the first occurrence specified text in a string.

```
const myBio = "I am Armi if from Armi india";  
console.log(myBio.indexOf("Armi"));
```

$\Rightarrow 5$
 $\Rightarrow 2 \Rightarrow i_am$
 0 1 2

```
console.log(myBio.indexOf('Armi', 9))
```

After - 9

$\Rightarrow 16$

b) lastIndexOf (backward)

Return the index within the calling String Object of the last occurrence of searchValue, or -1 if not found.

Program

```
const myData = 'I am Armi Web3';  
console.log(myData.lastIndexOf('A', 6))
```

'I am Armi'

6



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3. Searching for a String in a String

“Only search a data present or not.
not start a index position.”

```
const myBioData = 'I am Moteenulh';  
let SData = myBioData.search("am");  
console.log(SData);
```

output \Rightarrow 2

index

4. Extracting String parts

There are three method

- 1) slice (start, end)
- 2) substring (start, end)
- 3) substr (start, length)

a) slice () Method

Extract part of slice string
and return the extracted part.

```
let str = "Armi, Adil, Emad";  
let res = str.slice(0,4);  
console.log(res)
```

Armi;
0 1 2 3 4

\Rightarrow Armi why \Rightarrow ?

slice()

Starting element at the given start argument,
and end at, but does not include,
the given end argument.

Armi;
0 1 2 3 4

\Rightarrow Armi

why ?

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Note

The original array will not be changed.

Remember

javascript counts positions from zero, First position is 0.

```
var str = "Apple, Banana, Kiwi, mango";
```

```
let res = str.slice(7, -2);  
console.log(res);
```

Apple, B
0 1 2 3 4 5 6 7

end
-2

90
-2 -1

output Banana, Kiwi, mango

10. challenge Time

⇒ Display only 280 characters of a string like the one used in Twitter?

```
let myTweets = "
```

"";

```
let myActualTweet = myTweets.slice(0, 280);  
console.log(myActualTweet);  
console.log(myActualTweet.length);
```

output 280 character
4 280

6

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b) Substring Method

substring() is similar to slice()

Difference

substring() cannot accept negative index.

```
var str = "Apple, Banana, kiwi";
```

```
let res = str.substring(0, 4);
```

```
console.log(res)
```

Exclude

output

Apple

Apple

0 1 2 3 4

exclud

```
⇒ var str = "Apple, Banana, kiwi";
```

```
let res = str.substring(8, -2)
```

```
console.log(res)
```

output ⇒ Apple, - Ban

Apple, - Ban

0 1 2 3 4 5 6 7 8

exclud

Note

• If we give negative value then the character are counted from the 0th position

c) The substr Method

substr() is similar to slice().

difference

The difference is that the second parameter specifies the length of extracted parts.

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```
var str = "Apple, Banana, Kiwi";
```

```
let res = str.substr(0, 4); ⇒ Apple
```

```
let res = str.substr(7, -2); ⇒ empty
```

9mp ⇒ let res = str.substr(-4); ⇒ Kiwi

§ Replacing String Content

The replace() method replaces a specified value in a String.

```
let myBioData = 'I am Moteullah azmiazmi to changed'
azmi
azmi
```

Syntax

String.prototype.replace(searchFor, replaceWith)

```
let replaceData = myBioData.replace('azmi' 'Azmi');
```

ⓐ output

I am Moteullah ~~azmi~~ to change azmi

Point Remember

1: The replace() method does not ^{original} change the string it is called on. Its return a new string.

2. By default, the replace() method replace only first match.

3. By default, the replace() method is case sensitive.

Case Sensitive

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6. Extracting String characters

There are 3 methods

a) `charAt (position)`

b) `charCodeAt (position)`

* c) property access `[]`

a) `charAt()` Method

method returns the character at a specified index (position) in a string.

Programme

```
let str = "HELLO.WORLD";
```

```
console.log(str.charAt(9)); L  
                  (0) ⇒ H
```

b) `charCodeAt()`

```
console.log(str.charCodeAt(0)); ⇒ 72 ↔ H
```

“ It method returns the unicode of the character at a specified index in a string. ”

- The method return a UTF-16 code (a integer 0 and 65535).

- The Unicode Standard provide a unique number for every character, no matter the platform, device, application or language. UTF-8 is particularly popular Unicode encoding which has 8-bit code units,

9

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⇒ Unicode of last character in a string
let str = "Hello World";

let ^{last}str = str.length - 1;
console.log(str.charCodeAt(lastChar));

output ÷ 68 → D

7. other c) property Access

ECMAScript 5 (2009) allows
property access [] on strings.

var str = "Hello World";
console.log(str[0]); → not array
deal string

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7. Other useful Method

let myName = "Moteullah Bani";
console.log(myName.toUpperCase());
console.log(myName.toLowerCase());

output → MOTEEULLAH
moteullah

on concat() method

let fName = "Moteullah";
let lName = "Bani";

console.log(fName + lName) MoteullahBani
console.log(fName.concat(lName)); MoteullahBani
console.log(fName.concat(" ", lName)); Moteullah Bani

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trim()

Trim method used white space remove from both side. not middle.

```
var str = "... Hello World ...";  
console.log(str.trim());  
"Hello-World"
```

★ ★ ★ ⇒ How to convert string to an Array?

Split method

[7:38:00]

```
var txt = "a,b,c,d,e";  
console.log(txt.split(", ")); // split commas  
// " " " "  
console.log(txt.split(" ")); // split on space  
console.log(txt.split("|")); // split on pipe
```

split commas → ['a', 'b', 'c', 'd', 'e']

split on space → ['a', 'b', 'c', 'd', 'e']

if ⇒ var = "a,b,c | d,e"

['a,b,c', 'd,e']

Two part

if space

"a,b,c-d,e"

['a', 'b', 'c-d', 'e']