



Presentation 2023

STRING METHOD AND MATH LIBRARY

Content

01

Strings

02

Template Literals

03

String Interpolation

04

Escape Sequence Character

05

String properties and method

06

Math library

JS



Strings

String are used to store and manipulate text. String can be created using following syntax

```
let name="harry"  
console.log (name)  
console.log(name.length)
```

harry
5

Strings can also be created using single quotes.

```
let name='Prakash'
```

Prakash

Template literals and string interpolation

Template literals use backticks instead of quotes to define a string
`let name='Harry'`

With templates literals it is possible to use both single as well as double quotes inside a string
`let sentence =`The name "is" Harry's``

We can insert variable directly in template literal. This is called string interpolation
`let a =`This is ${name}``

```
JS string.js > ...  
1   let name="harry"  
2   let a =`This is ${name}`  
3   console.log(a)  
4  
5  
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  
C:\Program Files\nodejs\node.exe .\string.js  
This is harry
```

Escape Sequence Character

If you try to print the following string, JS will misunderstand it

```
let name='Adam D' Angelo'
```

We can use single quote escape sequence to solve the problem.

```
let name='Adam D'\Angelo'
```

Similarly we can use \" inside a string with double quotes. Other escape sequence characters are as follows

\n-newline

\t-Tab

\r-Carriage Return

```
JS string.js > ...
1   let fruit="app\nle"
2   console.log(fruit)
3
4
5
```

PROBLEMS OUTPUT DEBUG CONSOLE

```
C:\Program Files\nodejs\node.
app
le
```

String properties and methods

1. `let name="Harry"`

`name.length`

2. `name.toUpperCase()`

3. `name.toLowerCase()`

4. `name.slice(2,4)`

5. `name.replace("Har","Per")`

6. `let name1="Harry"`

`let name2="Naman"`

`let name3=name1.concat(name2,"yes")`

7. `let name=" Harry "`

`let newName=name.trim()`

Sales

```
JS string.js > ...
1  let name="Harry"
2  console.log(name.length);
3  console.log(name.toUpperCase());
4  console.log(name.toLowerCase());
5  console.log(name.slice(2,4))
6  console.log(name.replace("Har","Per"))
7
8
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

C:\Program Files\nodejs\node.exe .\string.js

5

HARRY

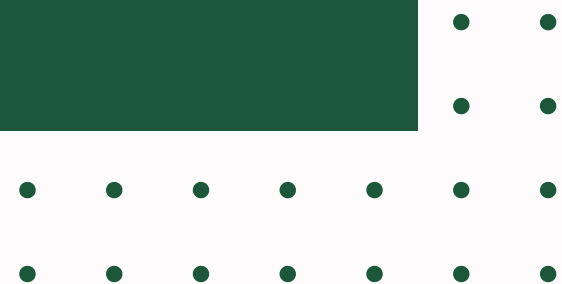
harry

rr

Perry

Math library

1. **Math.PI**: Returns the value of π .
2. **Math.round()**: Rounds a number to the nearest integer.
3. **Math.floor()**: Rounds a number down to the nearest integer.
4. **Math.ceil()**: Rounds a number up to the nearest integer.
5. **Math.abs()**: Returns the absolute value of a number.
6. **Math.sqrt()**: Returns the square root of a number.
7. **Math.pow()**: Returns the base to the exponent power.



Q / A 😊