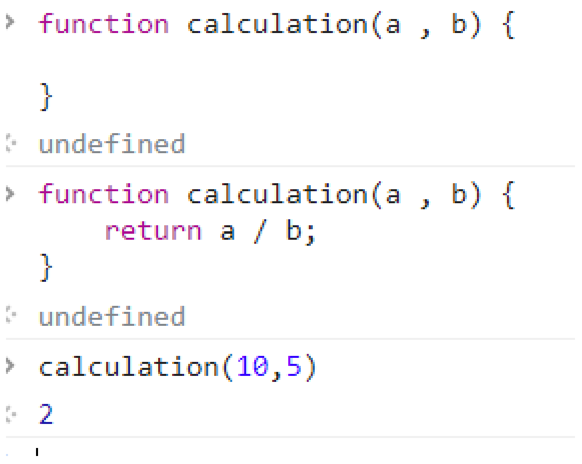
1.Invoke Function

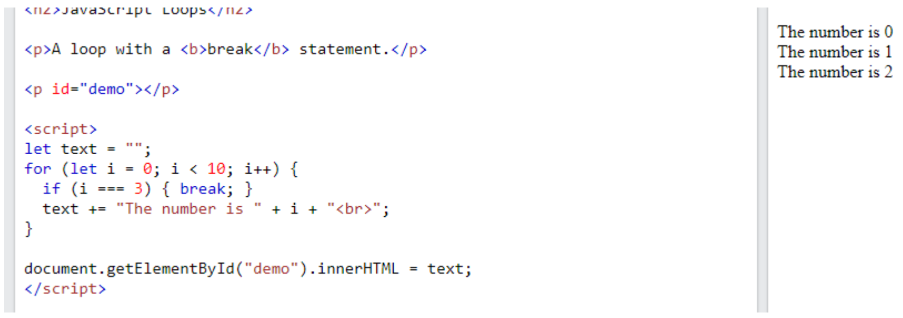
The code inside a function is executed when the function is invoke. The code inside a function in not executed when the function is defined



```
> function calculation(a , b) {

  }
< undefined
> function calculation(a , b) {
      return a / b;
  }
< undefined
> calculation(10,5)
< 2
```

2. Break Statement

The break statement can also be used to jump out of a loop.

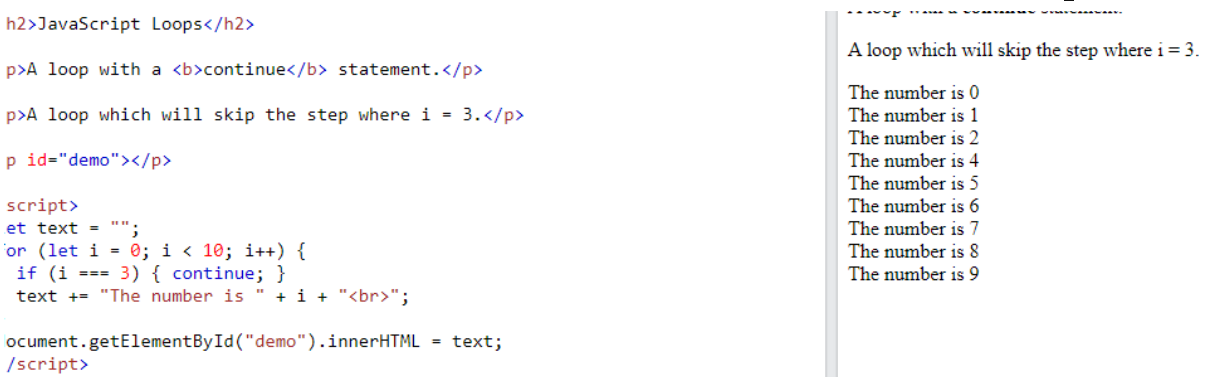


```
<h2>JavaScript Loops</h2>

<p>A loop with a <b>break</b> statement.</p>

<p id="demo"></p>

<script>
let text = "";
for (let i = 0; i < 10; i++) {
  if (i === 3) { break; }
  text += "The number is " + i + "<br>";
}

document.getElementById("demo").innerHTML = text;
</script>
```

```
The number is 0
The number is 1
The number is 2
```

Continue Statement

The continue statement breaks one iteration (in the loop), if a specified condition occurs, and continues with the next iteration in the loop.



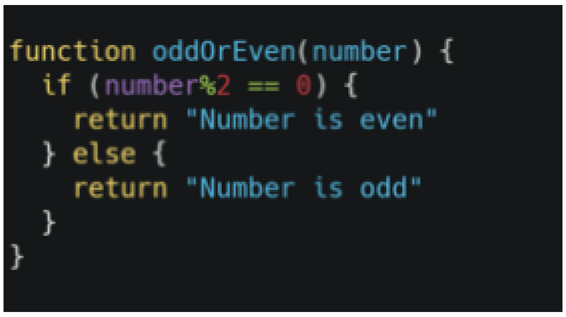
```
h2>JavaScript Loops</h2>

p>A loop with a <b>continue</b> statement.</p>

p>A loop which will skip the step where i = 3.</p>

p id="demo"></p>

script>
et text = "";
or (let i = 0; i < 10; i++) {
 if (i === 3) { continue; }
 text += "The number is " + i + "<br>";

ocument.getElementById("demo").innerHTML = text;
/script>
```

```
A loop with a continue statement.

A loop which will skip the step where i = 3.

The number is 0
The number is 1
The number is 2
The number is 4
The number is 5
The number is 6
The number is 7
The number is 8
The number is 9
```

3. **Types of Function**

Named Function:

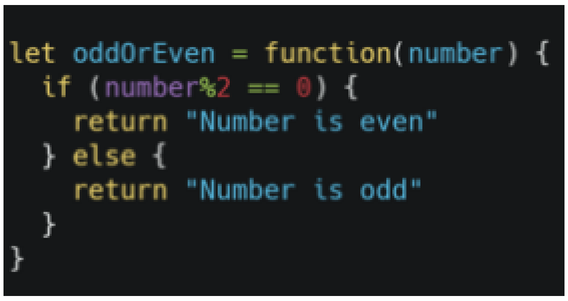
Named function is the function that we ***define*** it in the code and then call it whenever we need it by referencing its *name and passing some arguments* to it. Named functions are useful if we need to call a function **many times** to pass **different values** to it or run it several times.



```
function oddOrEven(number) {
  if (number%2 == 0) {
    return "Number is even"
  } else {
    return "Number is odd"
  }
}
```

Anonymous Function

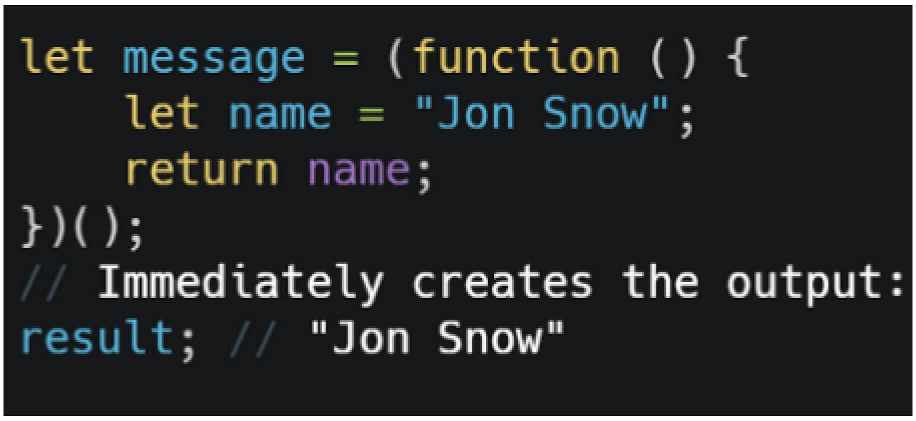
The anonymous functions don't have **names**. They need to be tied to something: *variable or an event to run*.



```
let oddOrEven = function(number) {
  if (number%2 == 0) {
    return "Number is even"
  } else {
    return "Number is odd"
  }
}
```

Immediately Invoked Function

Invoked function expression runs as soon as the ***browser encounters*** it. The benefit of this function is that it **runs immediately** where it's located in the code and produces a *direct output*. That means it is **unaffected** by code which appears further down in the script which can be useful.

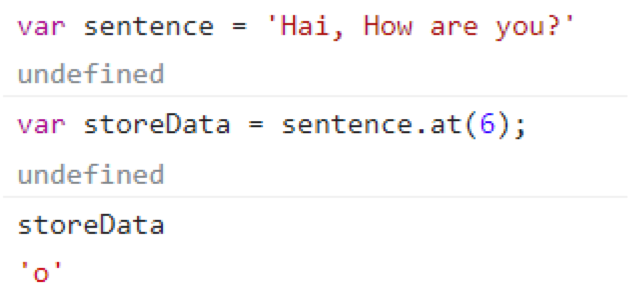

```
let message = (function () {
    let name = "Jon Snow";
    return name;
})();
// Immediately creates the output:
result; // "Jon Snow"
```

4.**String Methods**

1. **at()**

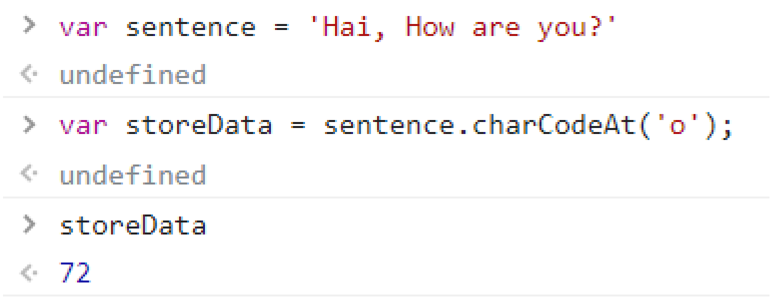
It takes Integer value and returns a new String. This methods allows for positive and negative Integers. Negative integers count back from the last string characters.

It is same As **CharAt()** methods.


```
var sentence = 'Hai, How are you?'
undefined
var storeData = sentence.at(6);
undefined
storeData
'o'
```

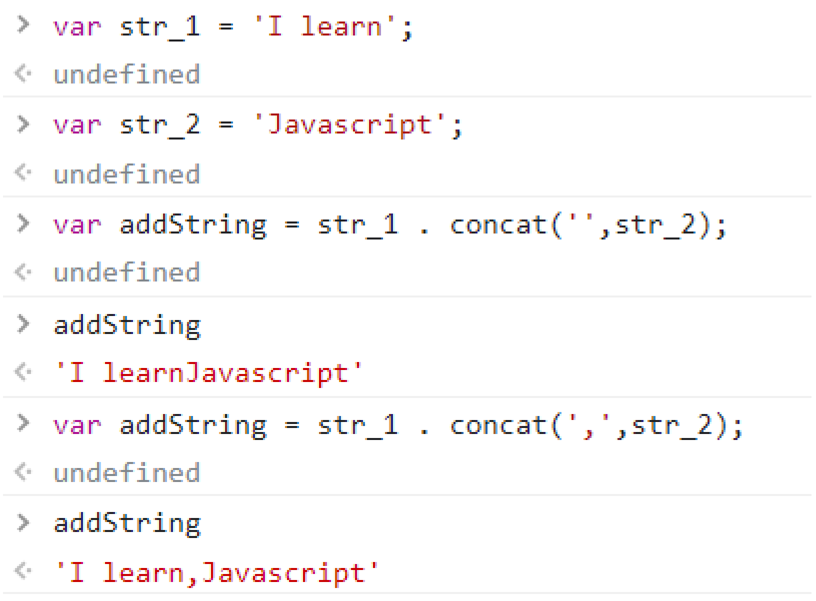
2. charCodeAt()

It returns an integer value between 0 to 65535 representing UTF-16 Value. (ASCII Value)


```
> var sentence = 'Hai, How are you?'
< undefined
> var storeData = sentence.charCodeAt('o');
< undefined
> storeData
< 72
```

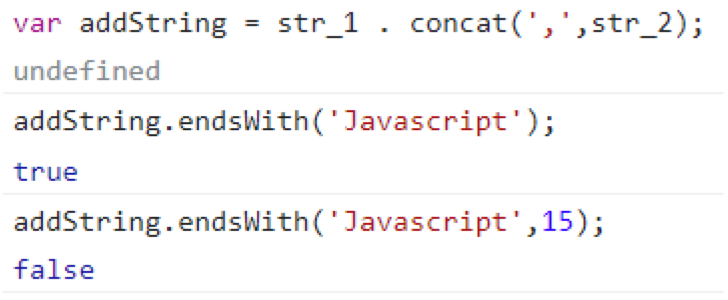
3. concat()

It returns concatenates the string arguments to the calling string and returns a new string.



```
> var str_1 = 'I learn';
< undefined
> var str_2 = 'Javascript';
< undefined
> var addString = str_1 . concat('',str_2);
< undefined
> addString
< 'I learnJavascript'
> var addString = str_1 . concat(',',str_2);
< undefined
> addString
< 'I learn,Javascript'
```

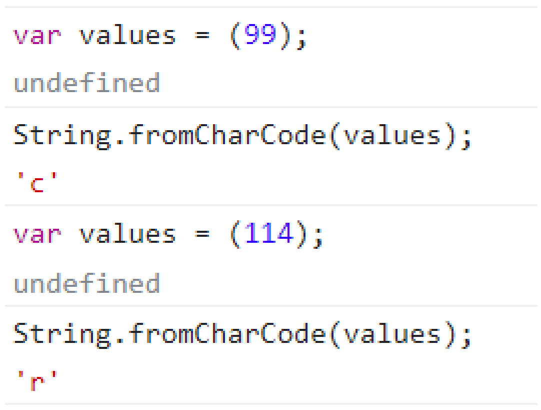
4. endsWith()
The Methods used to string ends with the character of a specified string, it return True of False statement. (string, length)



```
var addString = str_1 . concat(',',str_2);
undefined
addString.endsWith('Javascript');
true
addString.endsWith('Javascript',15);
false
```

5. fromCharCode()

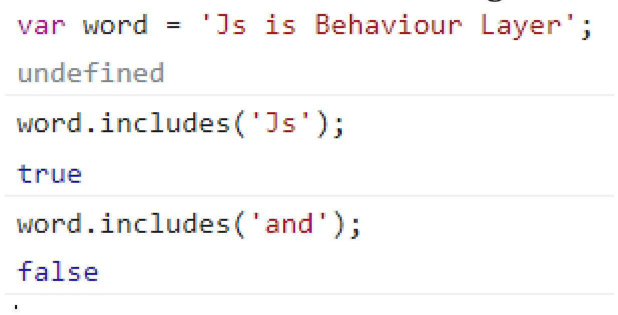
The result is string created from the specified sequence of UTF-16 code units.



```
var values = (99);
undefined
String.fromCharCode(values);
'c'
var values = (114);
undefined
String.fromCharCode(values);
'r'
```

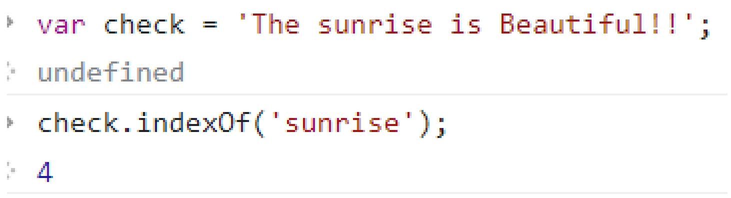
6.includes()

It performs case-sensitive search to determine whether one string may be found within another string, returning true or false condition.



```
var word = 'Js is Behaviour Layer';
undefined
word.includes('Js');
true
word.includes('and');
false
```

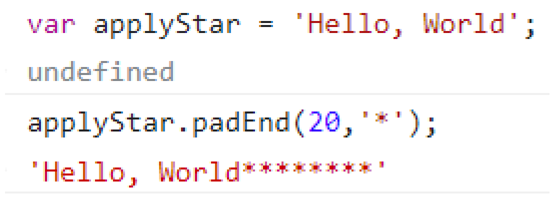
7.indexOf()
Returns Index position.



```
var check = 'The sunrise is Beautiful!!';
undefined
check.indexOf('sunrise');
4
```

8. padEnd()

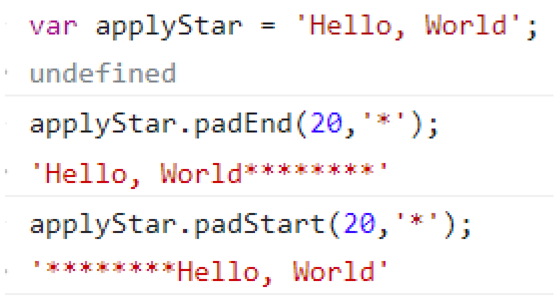
String reaches a given length. The padding is applied from the end of the current string.



```
var applyStar = 'Hello, World';
undefined
applyStar.padEnd(20,'*');
'Hello, World********'
```

9. padStart()

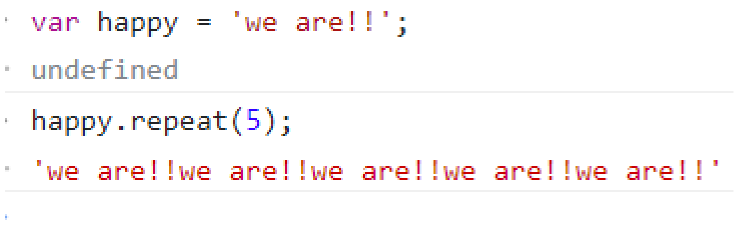
String reaches a given length. The padding is applied from the start of the current string.



```
var applyStar = 'Hello, World';
undefined
applyStar.padEnd(20,'*');
'Hello, World********'
applyStar.padStart(20,'*');
'********Hello, World'
```

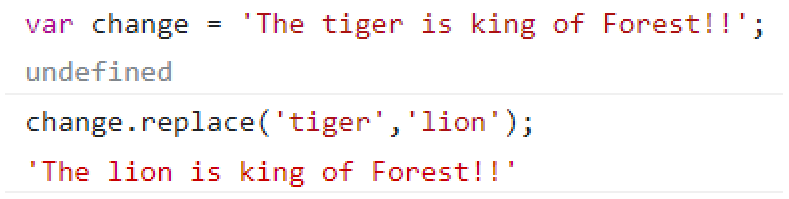
10.repeat()

returns a new string which contains the specified number of copies of the string on which it was called, concatenated together.



```
var happy = 'we are!!';
undefined
happy.repeat(5);
'we are!!we are!!we are!!we are!!we are!!'
```

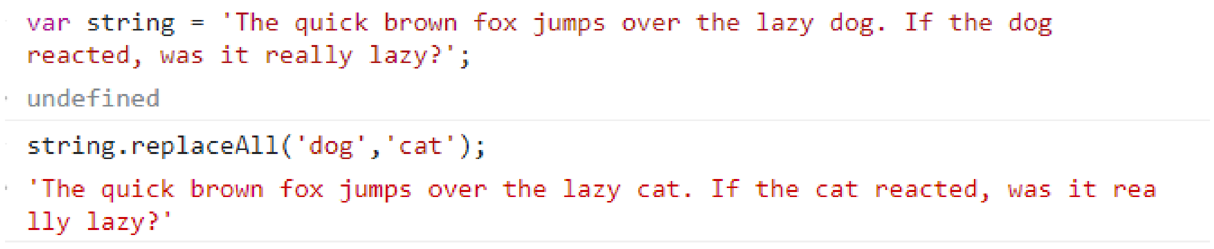
11. replace()
It return replace the given string. The changes included in (old string) given string.



```
var change = 'The tiger is king of Forest!!';
undefined
change.replace('tiger','lion');
'The lion is king of Forest!!'
```

12. replaceall()

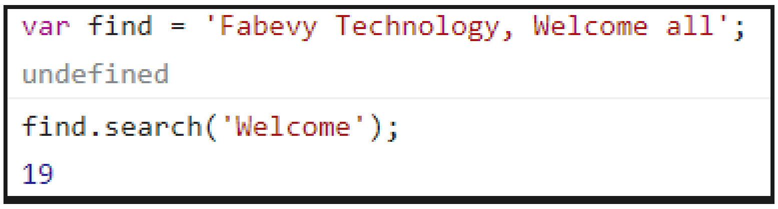
It same as replace() method.



```
var string = 'The quick brown fox jumps over the lazy dog. If the dog
reacted, was it really lazy?';
undefined
string.replaceAll('dog','cat');
'The quick brown fox jumps over the lazy cat. If the cat reacted, was it rea
lly lazy?'
```

13. search()

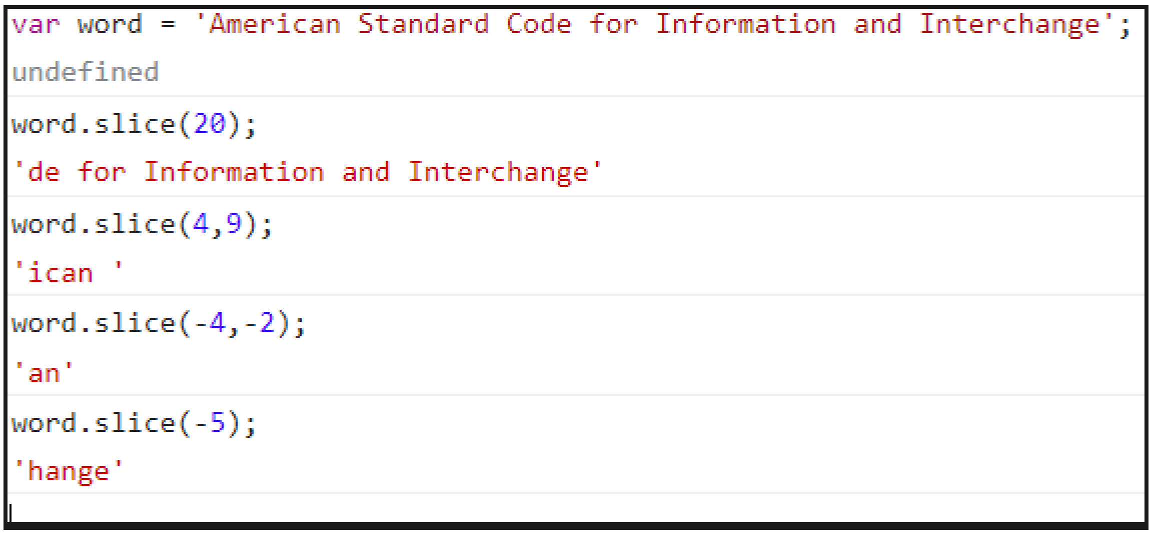
method executes a search for a match between a regular expression and this String object.



```
var find = 'Fabevy Technology, Welcome all';
undefined
find.search('Welcome');
19
```

14. slice()

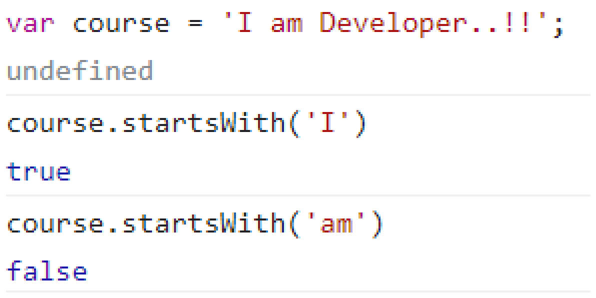
This method extracts a section of a string and returns it as a new string, without modifying the original string.



```
var word = 'American Standard Code for Information and Interchange';
undefined
word.slice(20);
'de for Information and Interchange'
word.slice(4,9);
'ican '
word.slice(-4,-2);
'an'
word.slice(-5);
'hange'
```

16.startsWith()

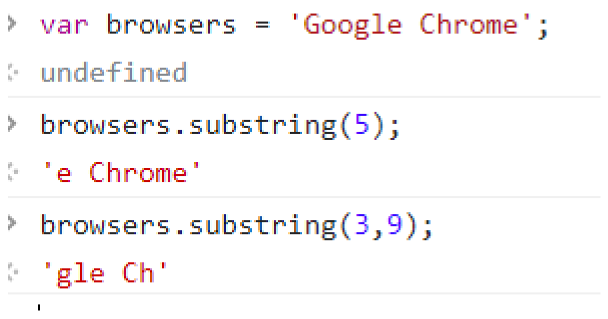
It returns string begins with the characters of a specified string, returning true or false statements. (word, position)



```
var course = 'I am Developer..!!';
undefined
course.startsWith('I')
true
course.startsWith('am')
false
```

17. substring()

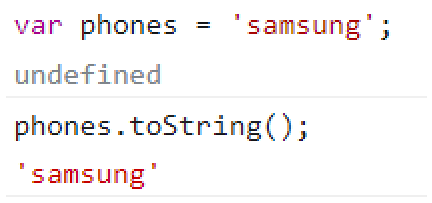
It part of the string between start and end index value, it is saame as slice.



```
> var browsers = 'Google Chrome';
< undefined
> browsers.substring(5);
< 'e Chrome'
> browsers.substring(3,9);
< 'gle Ch'
```

18. toString()

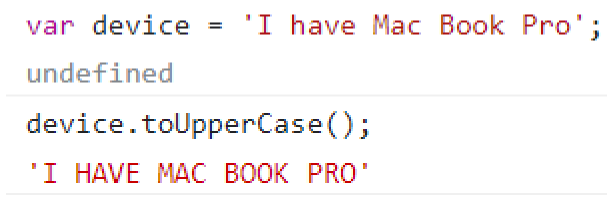
It representing a string of the specified object.



```
var phones = 'samsung';
undefined
phones.toString();
'samsung'
```

19. toUpperCase()

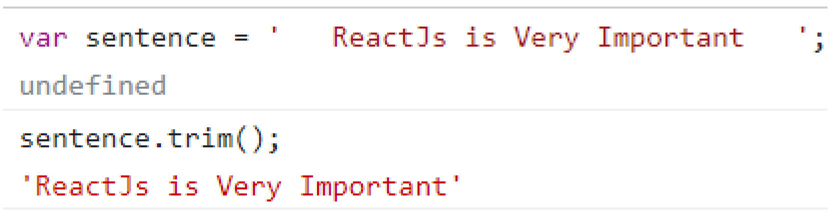
The Result is an Uppercase model.



```
var device = 'I have Mac Book Pro';
undefined
device.toUpperCase();
'I HAVE MAC BOOK PRO'
```

20. trim()

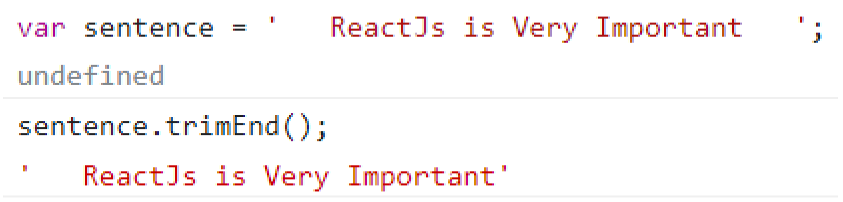
It return removes whitespaces from both ends, without modifying a original string.It is Include all characters (space, tab,and etc).



```
var sentence = '   ReactJs is Very Important   ';
undefined
sentence.trim();
'ReactJs is Very Important'
```

21. trimEnd()

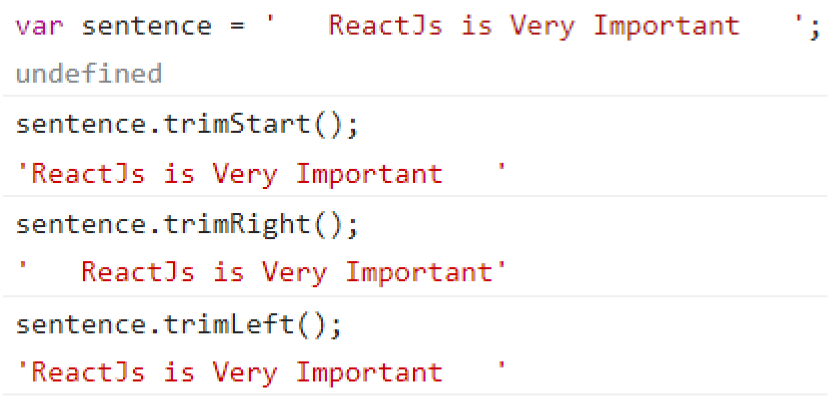
This method removes whitespaces from the end of a string.



```
var sentence = '   ReactJs is Very Important   ';
undefined
sentence.trimEnd();
'   ReactJs is Very Important'
```

22. trimStart()

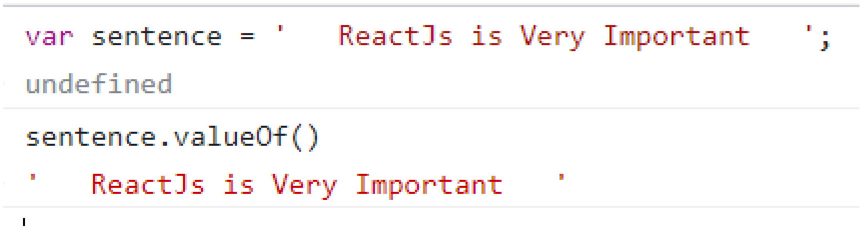
This method removes whitespaces from the beginning of a string.



```
var sentence = '   ReactJs is Very Important   ';
undefined
sentence.trimStart();
'ReactJs is Very Important   '
sentence.trimRight();
'   ReactJs is Very Important'
sentence.trimLeft();
'ReactJs is Very Important   '
```

23.valueOf()

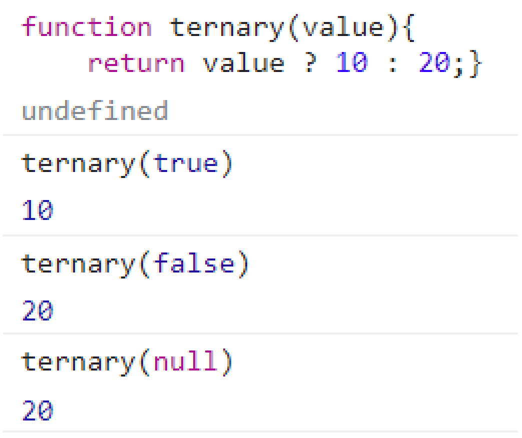
It return primitive value of a string.



```
var sentence = '   ReactJs is Very Important   ';
undefined
sentence.valueOf()
'   ReactJs is Very Important   '
```

6. Ternary operator

The conditional (ternary) operator is the only JavaScript operator that takes three operands: a condition followed by a question mark ( ), then an expression to execute if the condition is truthy followed by a colon ( ), and finally the expression to execute if the condition is falsy. This operator is frequently used as an alternative to an if...else statement.



```
function ternary(value){
    return value ? 10 : 20;}
undefined
ternary(true)
10
ternary(false)
20
ternary(null)
20
```