ФАКУЛТЕТ ЗА ИНФОРМАТИЧКИ НАУКИ И КОМПЈУТЕРСКО ИНЖЕНЕРСТВО

Auditory exercises 4

Internet programming

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Strings in JavaScript

- Stings in JavaScript store a arrays od characters like “Finki” .
- A string can be written in single or double quotation marks.

```
var carname = "Volvo XC60";
var carname = 'Volvo XC60';
```

Methods

Method	Description
charAt()	Returns the character at the specified index (position)
charCodeAt()	Returns the Unicode of the character at the specified index
concat()	Joins two or more strings, and returns a new joined strings
endsWith()	Checks whether a string ends with specified string/characters
fromCharCode()	Converts Unicode values to characters
includes()	Checks whether a string contains the specified string/characters
indexOf()	Returns the position of the first found occurrence of a specified value in a string
lastIndexOf()	Returns the position of the last found occurrence of a specified value in a string
localeCompare()	Compares two strings in the current locale
match()	Searches a string for a match against a regular expression, and returns the matches
repeat()	Returns a new string with a specified number of copies of an existing string
replace()	Searches a string for a specified value, or a regular expression, and returns a new string where the specified values are replaced
search()	Searches a string for a specified value, or regular expression, and returns the position of the match
slice()	Extracts a part of a string and returns a new string
split()	Splits a string into an array of substrings
startsWith()	Checks whether a string begins with specified characters
substr()	Extracts the characters from a string, beginning at a specified start position, and through the specified number of character
substring()	Extracts the characters from a string, between two specified indices
toLocaleLowerCase()	Converts a string to lowercase letters, according to the host's locale
toLocaleUpperCase()	Converts a string to uppercase letters, according to the host's locale
toLowerCase()	Converts a string to lowercase letters
toString()	Returns the value of a String object
toUpperCase()	Converts a string to uppercase letters
trim()	Removes whitespace from both ends of a string
valueOf()	Returns the primitive value of a String object

Problem 1

- Write a JavaScript function that will check if some data is a string or not.

- Example:

```
console.log(is_string('w3resource'));
true

console.log(is_string([1, 2, 4, 0]));
false
```

Solution

```
function is_string(input) {
        if (Object.prototype.toString.call(input) ===
                                        '[object String]’)
                return true;
        else
                return false;
}
```

Problem 2

- Write a JavaScript function that will check is some string empty or not.

- Example:

```
console.log(is_Blank(''));
console.log(is_Blank('abc'));

true
false
```

Solution

```
function is_Blank(input) {
        if (input.length === 0)
                return true;
        else
                return false;
}
```

Problem 3

- Write a JavaScript function that given string will „parameterize“

- Example:

```
console.log(string_parameterize("Robin Singh from USA."));

"robin-singh-from-usa"
```

Solution

```
function string_parameterize(str1) {
        return str1.trim().toLowerCase().replace(/[^a-zA-Z0-
9 -]/, "").replace(/\s/g, "-");
}
```

Problem 4

- Write a JavaScript function which the first letter of given string will make capital.

- Example:

```
console.log(capitalize('js string exercises'));

"Js string exercises"
```

Solution

```
function capitalize(str1) {
        return str1.charAt(0).toUpperCase() + str1.slice(1);
}
```

Problem 5

- Write a JavaScript function that will put one string into other in specific position.

- Example:

```
console.log(insert('We are doing some exercises.'));
console.log(insert('We are doing some
exercises.','JavaScript '));
console.log(insert('We are doing some
exercises.','JavaScript ',18));

"We are doing some exercises."
"JavaScript We are doing some exercises."
"We are doing some JavaScript exercises."
```

Solution

```
function insert(main_string, ins_string, pos) {
        if(typeof(pos) == "undefined") {
            pos = 0;
        }
        if(typeof(ins_string) == "undefined") {
            ins_string = '';
        }
        return main_string.slice(0, pos) + ins_string +
        main_string.slice(pos);
    }
```

Problem 6

- Write a JavaScript function that cuts a string if there are more than a certain number of characters. The strings will end with „...“ or with another specific string.

- Example:

```
console.log(text_truncate('We are doing JS string
exercises.'))
console.log(text_truncate('We are doing JS string
exercises.',19))
console.log(text_truncate('We are doing JS string
exercises.',15,'!!'))

"We are doing JS string exercises."
"We are doing JS ..."
"We are doing !!"
```

Solution

```
function text_truncate(str, length, ending) {
    if (length == null) {
      length = 100;
    }
    if (ending == null) {
      ending = '...';
    }
    if (str.length > length) {
      return str.substring(0, length - ending.length) + ending;
    } else {
      return str;
    }
  }
```

Problem 7

- Write a JavaScript function that will delete the first appearance in a string searchstr into string str.

- Solution:

```
console.log(remove_first_occurrence("The quick brown
fox jumps over the lazy dog", 'the'));
```

```
"The quick brown fox jumps over lazy dog"
```

Solution

```
function remove_first_occurrence(str, searchstr) {
	var index = str.indexOf(searchstr);
	if (index === -1) {
		return str;
	}
	return str.slice(0, index) + str.slice(index +
searchstr.length);
}
```

Problem 8

- Write a JavaScript function that for given string will return the part before (a) or after (b) into char.

- Example:

```
console.log(subStrAfterChars('w3resource: JavaScript
Exercises', ':','a'));
console.log(subStrAfterChars('w3resource: JavaScript
Exercises', 'E','b'));

"w3resource"
"xercises"
```

Solution

```
function subStrAfterChars(str, char, pos) {
  if(pos=='b')
   return str.substring(str.indexOf(char) + 1);
  else if(pos=='a')
   return str.substring(0, str.indexOf(char));
  else
  return str;
}
```