### **Lab: DOM Introduction**

Problems for in-class lab for the "JavaScript Advanced" course @ SoftUni. Submit your solutions in the SoftUni judge system at https://judge.softuni.bg/Contests/2760/DOM-Introduction-Lab

#### **Environment Specifics**

Please, be aware that every JS environment may behave differently when executing code. Certain things that work in the browser are not supported in **Node.js**, which is the environment used by **Judge**.

The following actions are **NOT** supported:

- .forEach() with NodeList (returned by querySelector() and querySelectorAll())
- .forEach() with HTMLCollection (returned by getElementsByClassName() and element.children)
- Using the **spread-operator** (...) to convert a **NodeList** into an array
- append() in Judge (use only appendChild())
- prepend()
- Always turn the collection into a JS array (for Each, for Of, et.)

If you want to perform these operations, you may use **Array.from()** to first convert the collection into an array.

#### 1. Edit Element

Create function edit() that takes three parameters.

### Input/Output

The first parameter is a reference to an HTML element, the other two parameters are string-match and replacer.

You have to replace all occurrences of the match inside the text content of the given element with a replacer.

#### 2. Collect List Items

Write a JS function that scans a given HTML list and appends all collected list items' text to a textarea on the same page when the user clicks on a button.

# Input/Output

There will be no input/output, your program should instead modify the DOM of the given HTML document.











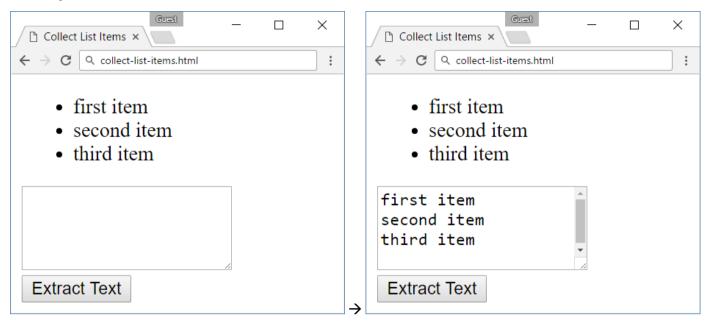








## **Examples**



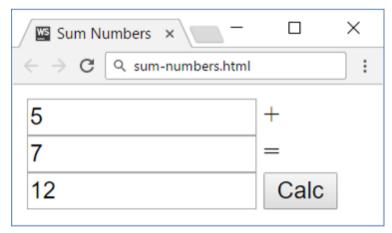
### 3. Sum Numbers

Write a JS function that reads two numbers from input fields in a web page and puts their sum in another field when the user clicks on a button.

### Input/Output

There will be no input/output, your program should instead modify the DOM of the given HTML document.

## **Examples**



## 4. Show More

Write a JS function that expands a hidden section of text when a link is clicked. The link should disappear as the rest of the text shows up.

# Input/Output

There will be no input/output, your program should instead **modify** the DOM of the given HTML document.







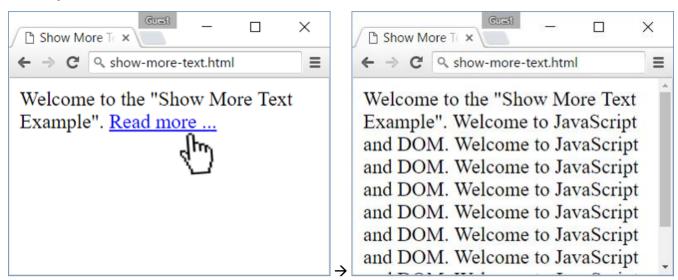








### **Examples**



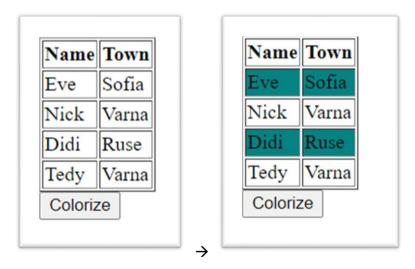
#### 5. Colorize Table

Write a JS function that changes the color of all even rows when the user clicks a button. Apply the color "Teal" to the target rows.

### Input/Output

There will be no input/output, your program should instead modify the DOM of the given HTML document.

### **Examples**



## 6. Sum Table

Write a JS function that finds the first table in a document and sums the values in the last column. The result is then displayed in an element with ID "sum".

# Input/Output

There will be no input/output, your program should instead **modify** the DOM of the given HTML document.











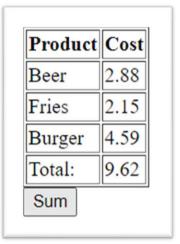






### **Examples**





#### 7. Extract Parenthesis

Write a JS function that when executed, extracts all parenthesized text from a target paragraph by given element ID. The result is a string, joined by "; " (semicolon, space).

#### Input

Your function will receive a string parameter, representing the target element ID, from which text must be extracted. The text should be extracted from the DOM.

#### **Output**

**Return a string** with all matched text, separated by "; " (semicolon, space).

## **Examples**

```
•••<!DOCTYPE html> == $0
 <html lang="en">
 <head>...</head>
 ▼<body>
   ▼
          The Rose Valley (Bulgaria) is located just south of the Balkan Mountains
      (Kazanlak). The most common oil-bearing rose found in the valley is the pink-
      petaled Damask rose (Rosa damascena Mill).
     </body>
 </html>
```

```
Sample call
let text = extract("content");
                                    Result (stored in variable text)
```













Bulgaria; Kazanlak; Rosa demascena Mill















