Lab: DOM and Events

1. 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.

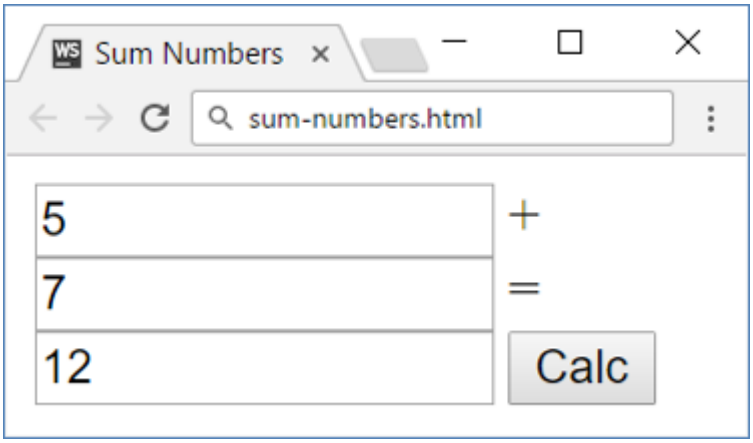
Input/Output

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

Sample HTML

`<input type="text" id="num1" /> +`
`<input type="text" id="num2" /> =`
`<input type="text" id="sum" readonly="readonly" />`
`<input type="button" value="Calc" onclick="calc()" />`
`<script>`
`  function calc() {`
`  // TODO: sum = num1 + num2`
`  }`
`</script>`

Examples



2. 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.

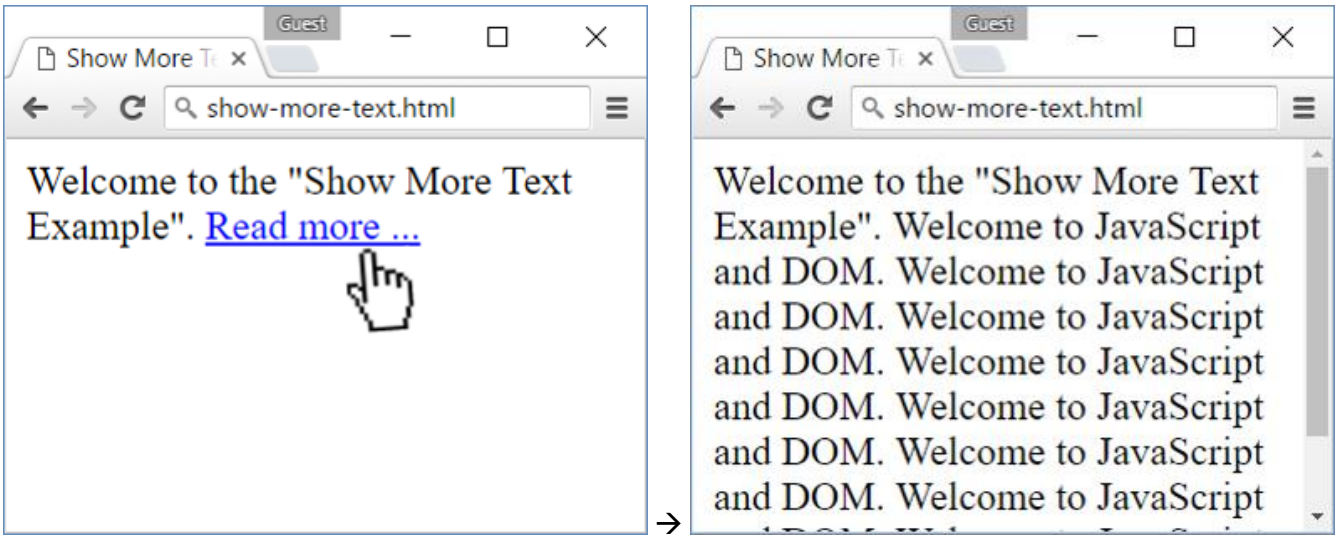
Input/Output

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

Sample HTML
`Welcome to the "Show More Text Example".`

```
<a href="#" id="more" onclick= "showText()">Read more …</a>
<span id="text" style= "display:none">Welcome to JavaScript and DOM.</span>
<script>
  function showText() {
    // TODO
  }
</script>
```

Examples



3. Collect List Items

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

Input/Output

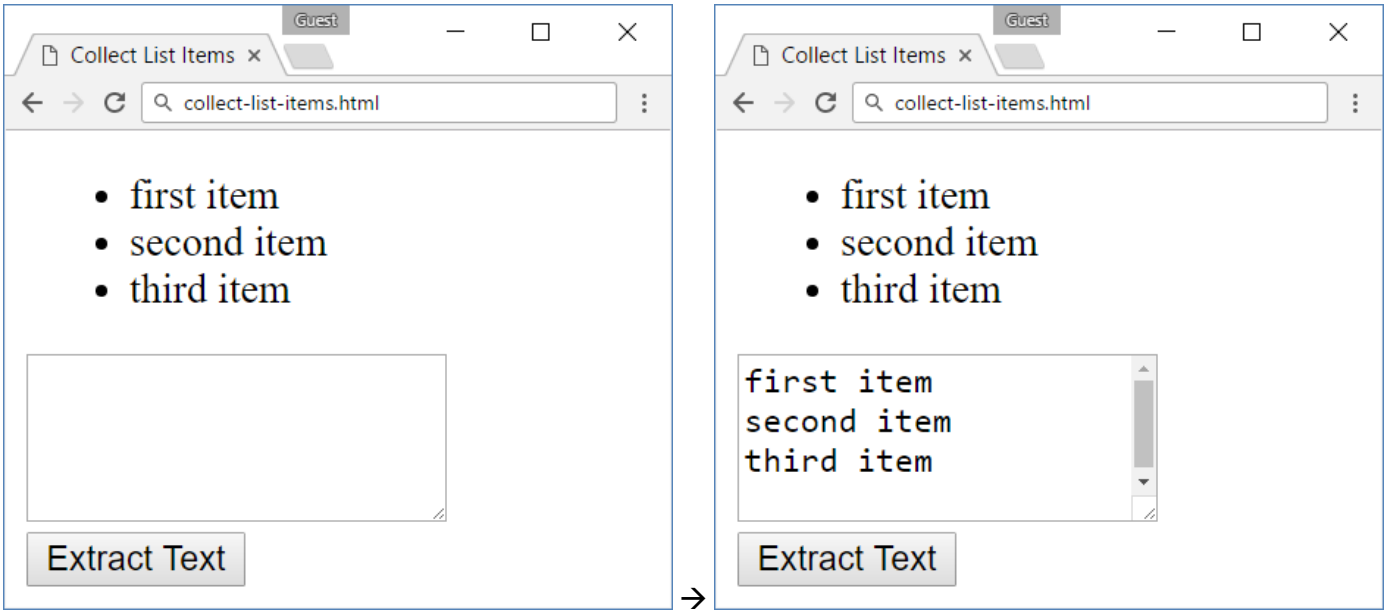
There will be no input/output, your program should instead **modify** the given HTML file.

Sample HTML

```
<ul id="items">
  <li>first item</li>
  <li>second item</li>
  <li>third item</li>
</ul>
<textarea id="result"></textarea>
<br>
<button onclick="extractText()">Extract Text</button>
<script>
  function extractText() {
    // TODO
```

```
  }
</script>
```

Examples



4. Add and Delete

Extend the previous problem to display a **[Delete] link** after each list item. **Clicking** it, should **delete** the item with no confirmation.

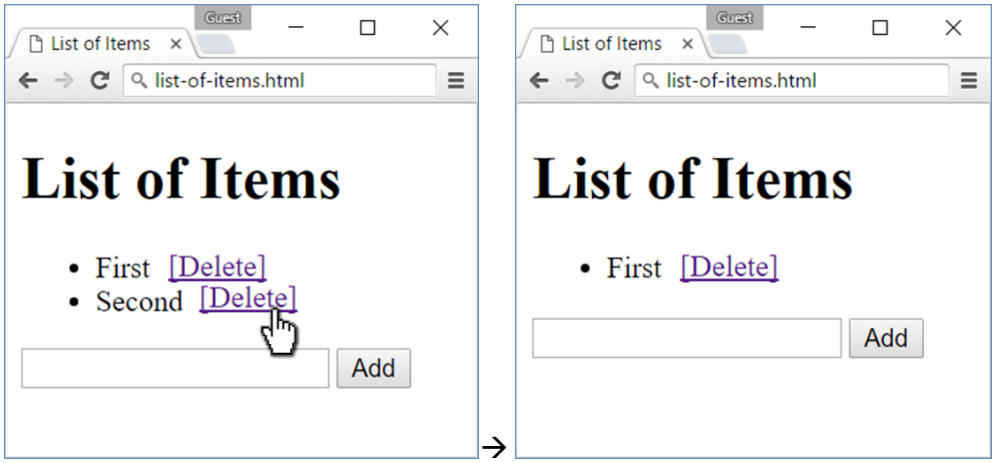
Input/Output

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

Sample HTML

```
<h1>List of Items</h1>
<ul id="items"></ul>
<input type="text" id="newText" />
<input type="button" value="Add"
  onclick="addItem()">
<script>
  function addItem() { ...
    function deleteItem() { ... }
  }
</script>
```

Examples



5. Stopwatch (Optional)

Write a JS program that **implements** a web timer that supports **minutes** and **seconds**. The user should be able to control it with **buttons**. Clicking **[Start] resets** the timer back to zero. Only one of the buttons should be enabled at a time (you cannot stop the timer if it's not running).

Input/Output

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

Sample HTML

`<div id="time" style="border:3px solid blue; text-align:center; font-size:2em; margin-bottom:10px">00:00</div>`
`<button id="startBtn">Start</button>`
`<button id="stopBtn" disabled="true">Stop</button>`
`<script>window.onload = function() { stopwatch(); }</script>`

Examples