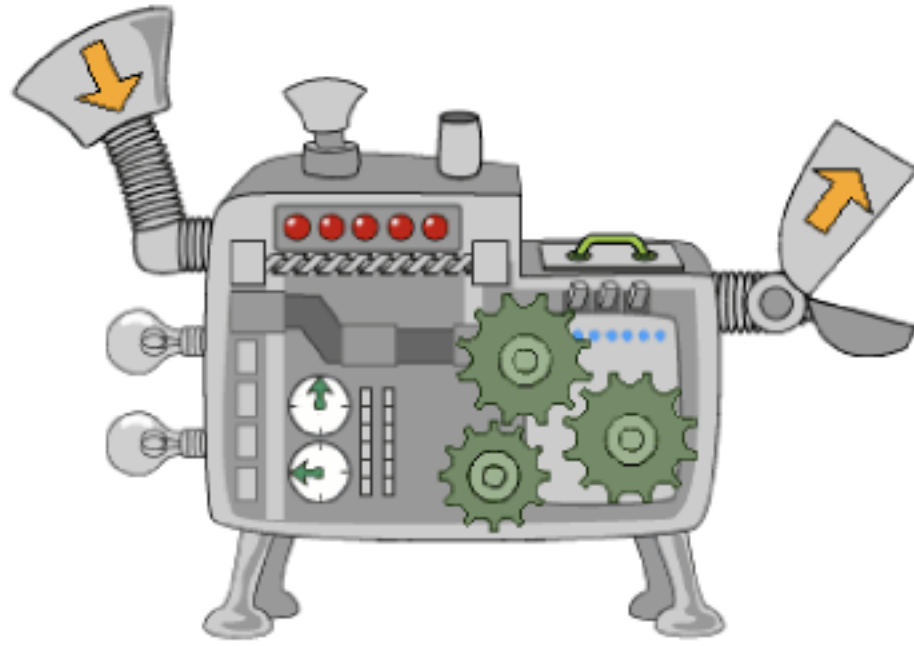


Version 1

Input/Output



Input: Output:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Input/Output</title>
    <script src="display.js"></script>
    <script>
      function doIt() {
        const input = document.getElementById("input").value,
        output = document.getElementById("output"),
        result = display(input);
        output.value = result;
      }
    </script>
  </head>
  <body>
    <center>
      <h1>Input/Output</h1>
      

      <p></p>

      <form>
        <label for="input">Input:</label>
        <input type="text" id="input" />
        <label for="output">Output:</label>
        <input type="text" id="output" readonly="readonly" />
        <input type="button" onClick="doIt()" value="Go" />
      </form>
    </center>
  </body>
</html>
```

```
function display(input) {
  return input.toUpperCase();
}
```

"event"

code fragment

Version 2

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Input/Output</title>
    ⚡ ⚡ Load in display.js as a module. →
    ⚡ ⚡ <script src="display.js"></script> →
    ✓ <script type="module" src="display.js"></script>

    ⚡ ⚡ Move this code into display.js →
    ⚡ ⚡ <script>
      function doIt() {
        const input = document.getElementById("input").value,
              output = document.getElementById("output"),
              result = display(input);
        output.value = result;
      }
    </script> →
  </head>
  <body>
    <center>
      <h1>Input/Output</h1>
      

      <p></p>

      <form>
        <label for="input">Input:</label>
        <input type="text" id="input" />
        <label for="output">Output:</label>
        <input type="text" id="output" readonly="readonly" />
        ⚡ ⚡ Remove the onClick="doIt()" code. Not a good way to do things.
        We will also give the button an id.
        →
        ⚡ ⚡ <input type="button" onClick="doIt()" value="Go" /> →
        <input type="button" id="go-button" value="Go" />
      </form>
    </center>
  </body>
</html>
```

Version 2

click

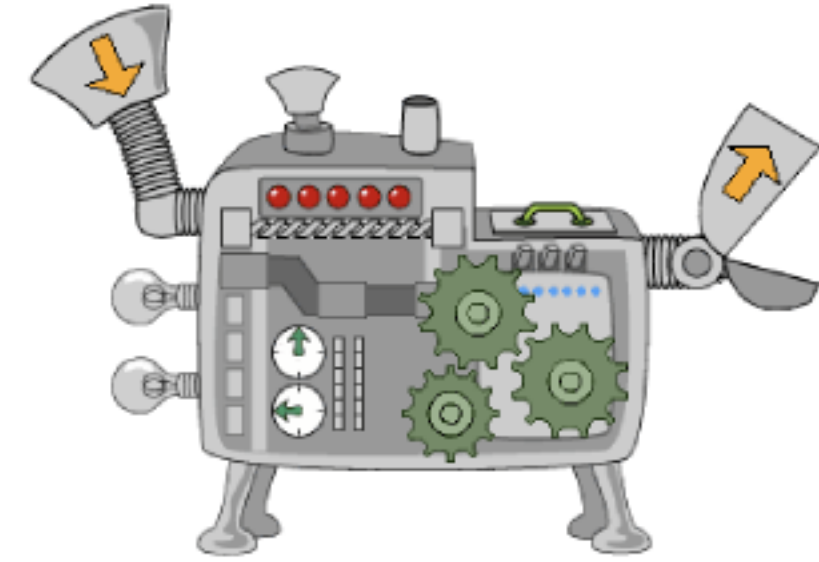
Click

```
// Assign event handlers to events.
const button = document.getElementById("go-button"); ✓

// All event listeners are passed an event object. There are various things you
// can do with this object
button.addEventListener("click", function(event) {
  const input = document.getElementById("input"), ✓
        output = document.getElementById("output"), ✓
        result = display(input.value);
  output.value = result; ✓

  // We prevent any default behavior that might occur. In this case, the default
  // is nothing. If it was a link, it would navigate to a new page.
  event.preventDefault(); ←
});

function display(input) {
  return input.toUpperCase();
}
```



Input: Output:

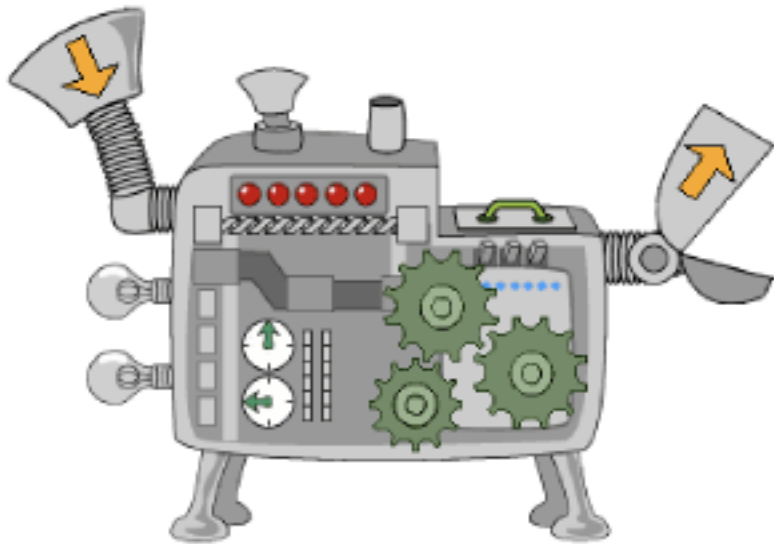
Version 3

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Input/Output</title>
    <script type="module" src="display.js"></script> ✓
  </head>
  <body>
    <center>
      <h1>Input/Output</h1>
      

      <p></p>

      <form>
        <label for="input">Input:</label>
        <input type="text" id="input" />
        <label for="output">Output:</label>
        <input type="text" id="output" readonly="readonly" />
        <!-- Remove the button -->
        <!-- <input type="button" id="go-button" value="Go" /> -->
      </form>
    </center>
  </body>
</html>
```

Input/Output



Input: Output:

```
// Assign event handlers to events.
const input = document.getElementById("input");
const output = document.getElementById("output");

// With the button removed, we add an event listener to the input element. The
// "keyup" event is triggered when a key is released. This causes our event
// handler to be invoked.
input.addEventListener("keyup", function (event) {
  // Call the display function with the input value and assign the result to the
  // output.
  const result = display(input.value);
  output.value = result;

  // Change the text and background color based on the result.
  if (result === "") {
    // All elements have a style property that allows us to set CSS properties.
    // We will talk more about CSS later.
    output.style.backgroundColor = "white";
    output.style.color = "black";
  } else {
    output.style.backgroundColor = "yellow";
    output.style.color = "red";
  }

  // No need to prevent the default behavior as there isn't any.
});

function display(input) {
  return input.toUpperCase();
}
```

function foo(event) { ... }
input.addEventListener("keyup", foo);

```
function eventhandler() {  
    .....  
}
```

```
e.addEventListener("keypress", eventhandler);
```

invokes
the
function!