

Introduction to Programming

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Goals

Goal 1: You will know how to add html elements using javascript.

Vocabulary

Document Object Model
DOM
Element
Append
Parent
Child

Code

```
document.createElement()  
document.createTextNode()  
document.body.appendChild()  
element.appendChild()
```

Partners

- Michael & Matthew
- Jake & Reese
- Chloe & Lauren
- Lorenzo & Kendall
- Lindsay & Nic
- Thomas B & Dom
- Max & Alaa
- Naz & Jack
- Izzy & Thomas C

- **What is your astrological sign? What does it say about you?**

1. For Loop Snippets (Computers Closed)

Goal 1: You will know how to add html elements using javascript.

basicStructure.html

```
<!doctype html>
<html>

  <head>
    <title>My Title</title>
  </head>

  <body>
    <h1>This is a header</h1>

    <p>This is a paragraph</p>

    <script>
      // My javascript code goes here
    </script>
  </body>

</html>
```

basicStructure.html

```
<!doctype html>  
<html>
```

html

```
<head>
```

head

```
  <title>My Title</title>  
</head>
```

title

"My Title"

```
<body>
```

body

```
  <h1>This is a header</h1>
```

h1

```
  <p>Hello</p>
```

p

"Hello"

```
  <script>
```

```
    // My javascript code goes here
```

```
  </script>
```

```
</body>
```

```
</html>
```

basicStructure.html

```
<!doctype html>
<html>

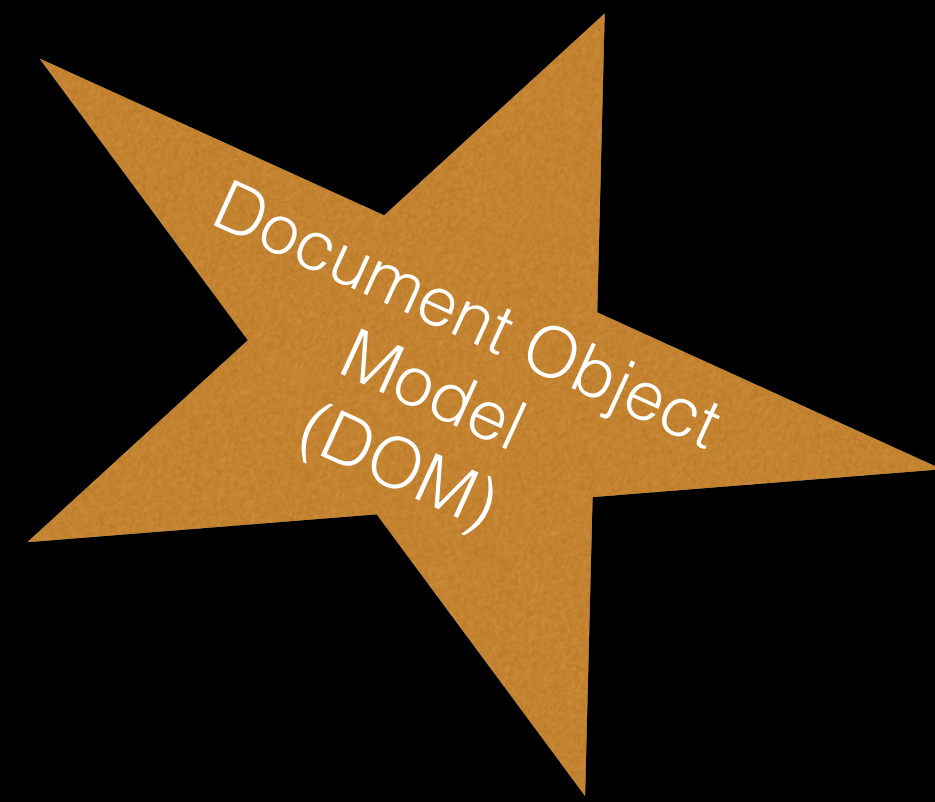
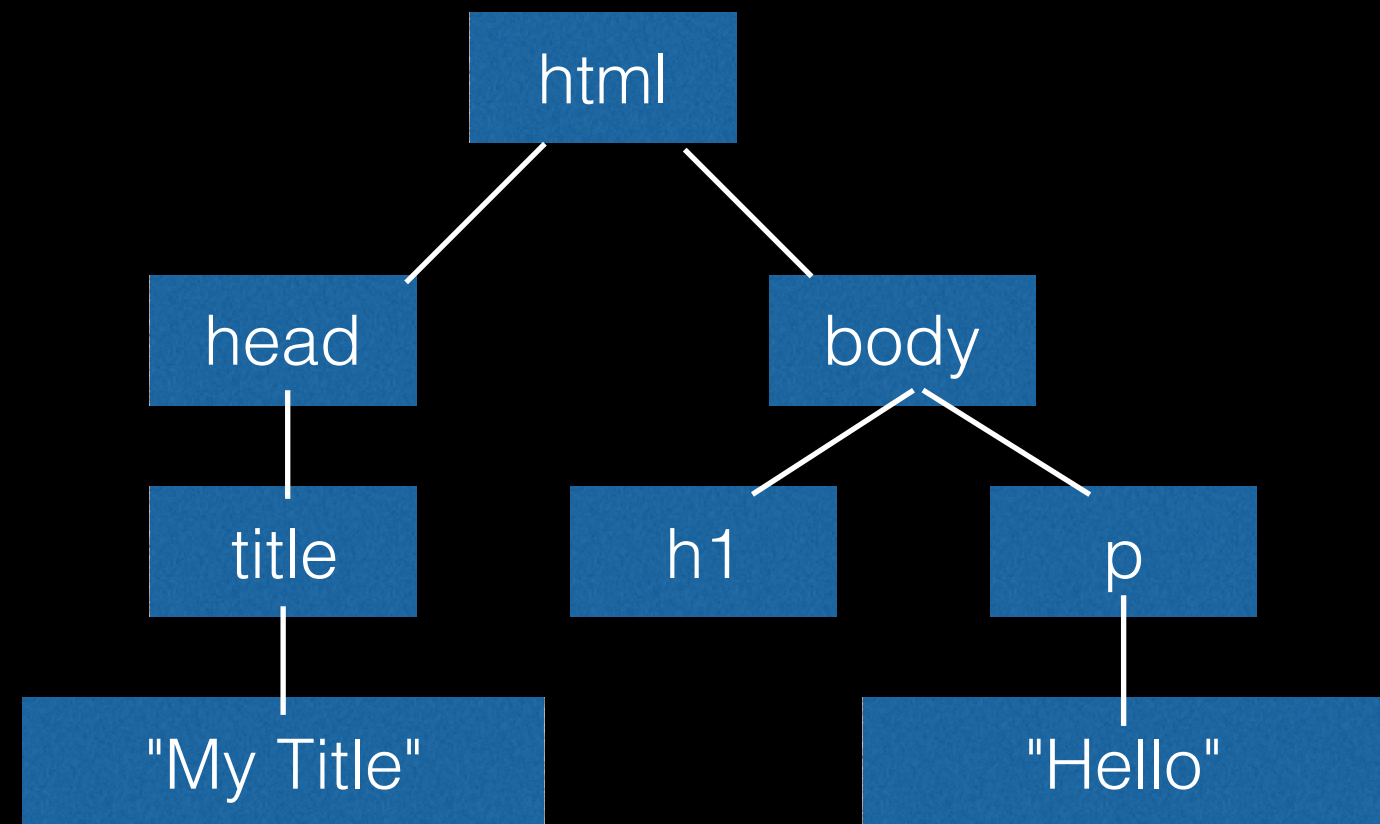
<head>
  <title>My Title</title>
</head>

<body>
  <h1>This is a header</h1>

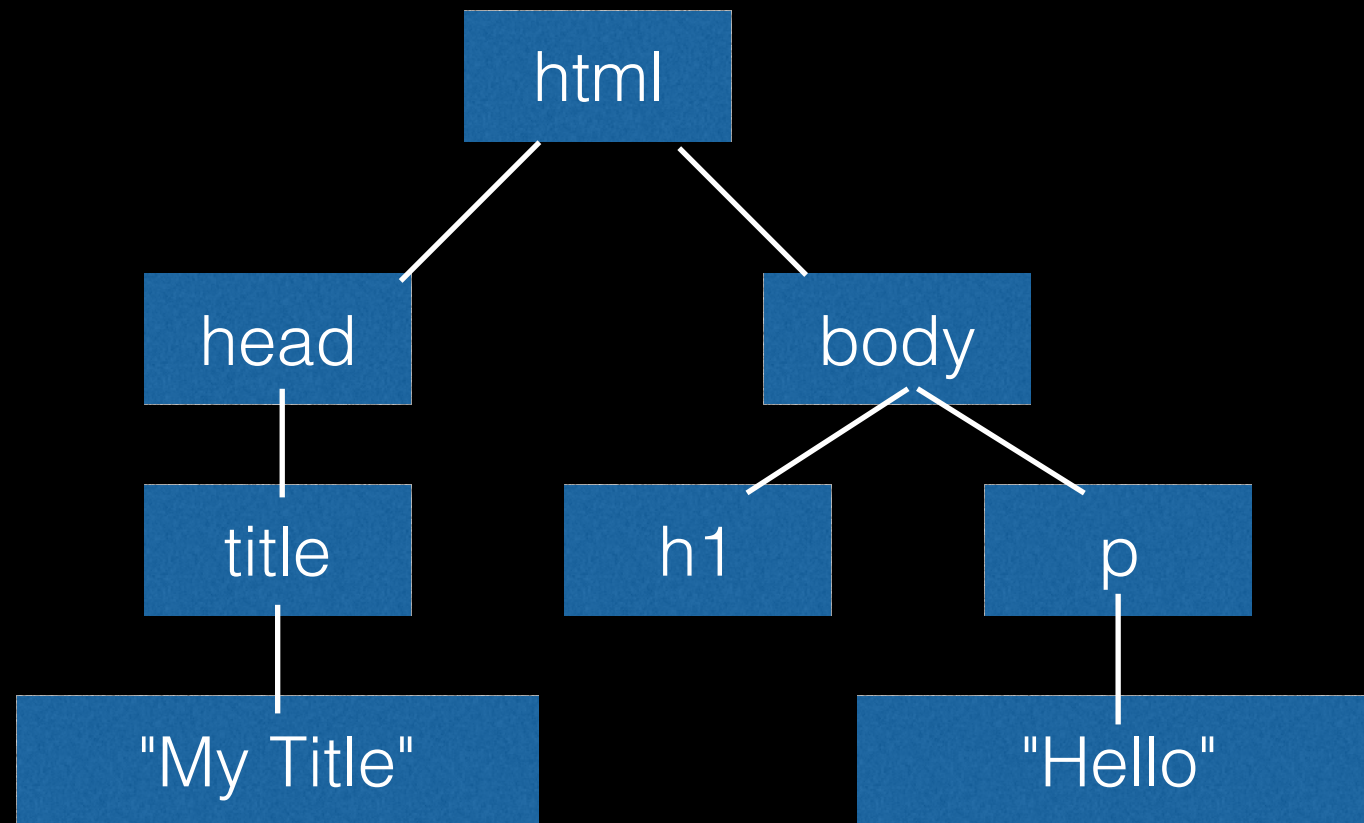
  <p>Hello</p>

  <script>
    // My javascript code goes here
  </script>
</body>

</html>
```



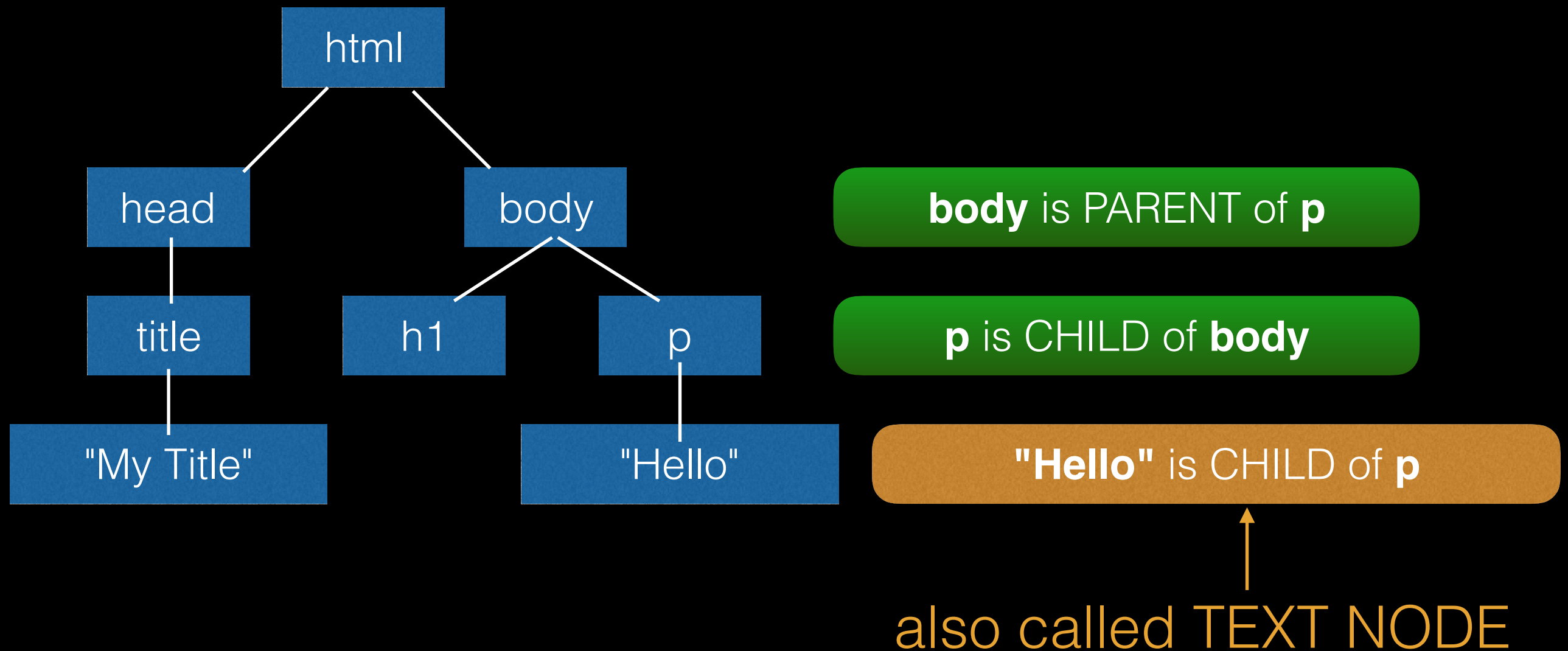
The DOM



html is PARENT of **body**

body is CHILD of **html**

The DOM



The DOM

In order to add **p** with text to webpage (html), you need to **CREATE** and **APPEND** each element

CREATE

p is CHILD of **body**

```
var para = document.createElement("p");
```

"Hello" is CHILD of **p**

```
var text = document.createTextNode("Hello");
```

APPEND

also called TEXT NODE

```
para.appendChild(text);
```

```
document.body.appendChild(para);
```

The DOM

```
<html>
<head>
</head>
<body>
  <script>

    var para = document.createElement("p");
    var text = document.createTextNode("Hello");
    para.appendChild(text);
    document.body.appendChild(para);

  </script>
</body>
</html>
```

Replaces
alert();

Practice!

- Modify AddingNumbers to display the final answer on the webpage.

Practice!

- Write a program that prompts the user for three numbers and then displays the largest number.

```
<!doctype html>
<html>
<head>
  <title>Largest Number</title>
</head>

<body>
  <script>
    var maxNum = -1000000000;

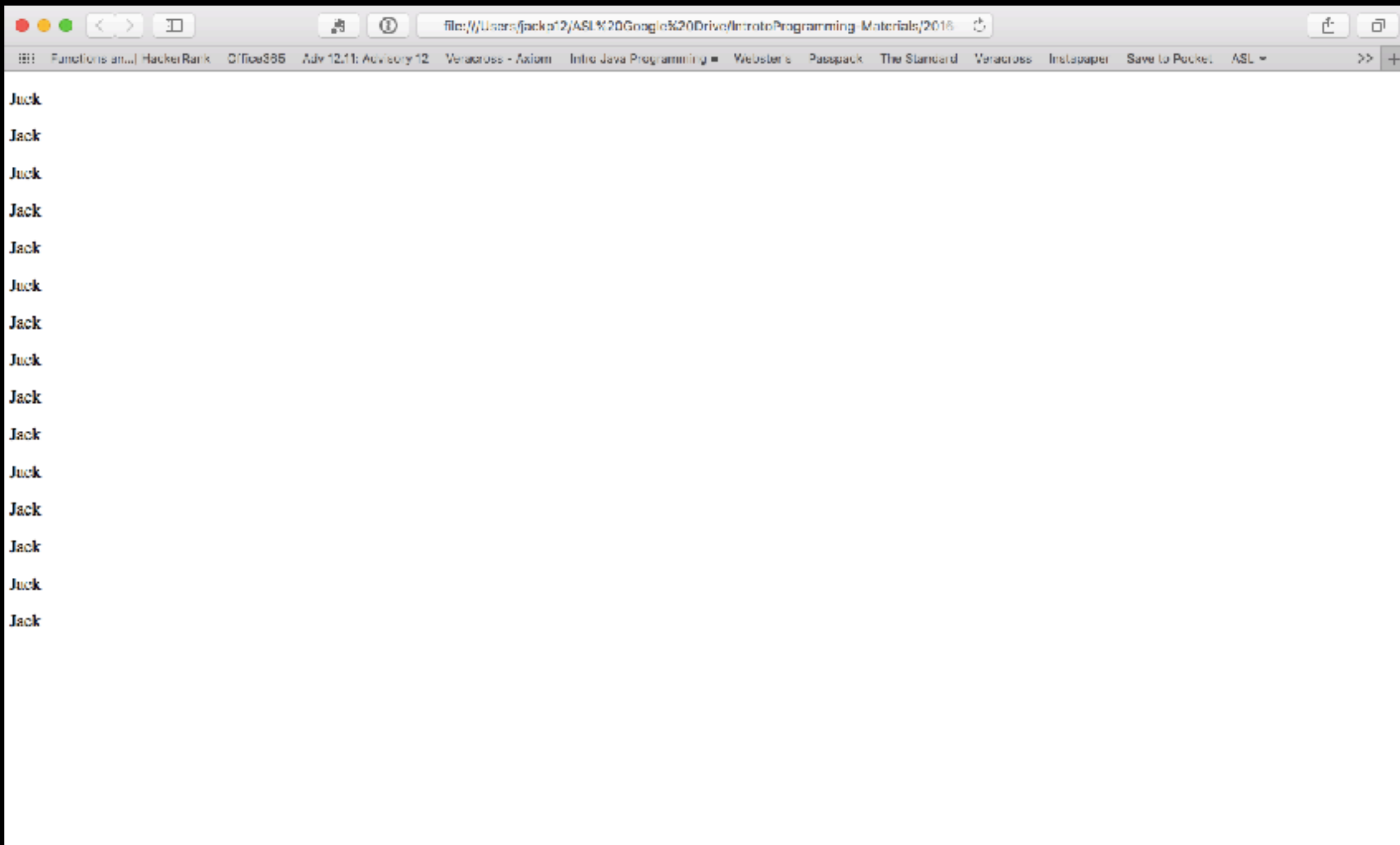
    for (var i=0; i<3; i++) {
      var userNumberStr = prompt("Please enter a number.");
      userNumber = parseInt(userNumberStr);
      if (userNumber > maxNum) {
        maxNum = userNumber;
      }
    }

    var message = "The largest number is " + maxNum;

    var para = document.createElement("p");
    var text = document.createTextNode(message);
    para.appendChild(text);
    document.body.appendChild(para);
  </script>
</body>
</html>
```

Practice!

- Write a program that prompts for a name and number of times to display.




```
<!doctype html>
<html>
<head>
  <title>MyName</title>
</head>

<body>
  <script>
    var name = prompt("What's your name?");
    var timesStr = prompt("How many times would you like to see it?");
    times = parseInt(timesStr);

    for (var i=0; i<times; i++) {
      var para = document.createElement("p");
      var text = document.createTextNode(name);
      para.appendChild(text);
      document.body.appendChild(para);
    }
  </script>
</body>
</html>
```

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