

Please answer the following questions. Submit questions and answers in a Word or a PDF file.

- 1. Why was LiveScript renamed JavaScript even though its functionality had nothing to do with Java?**

Even though its functionality had nothing to do with Java, Netscape renamed LiveScript to JavaScript to help capitalize on Java's success.

- 2. Write a line of code to initialize a variable for a dog named Fido with a weight of 22 lbs.**

The code would look as follows: `Var dog = {name: Fido, weight: 22};`

- 3. Write the HTML syntax for a blank web page with a title of "Chapter 1" for use as a wrapper for JavaScript.**

The HTML syntax for a blank web page with a title of "chapter 1" would look like this:

```
<!DOCTYPE HTML>
```

```
<html>
```

```
<head>
```

```
<title> Chapter 1 </title>
```

```
<script>
```

```
...
```

```
</html>
```

- 4. Write a while loop that will scoop 3 scoops of ice cream for me. Output the results to the browser.**

A while loop that will scoop 3 scoops of ice cream for me would look like this:

```
while(scoops > 0) {  
    document.write("Another scoop");  
    Scoops -= 1;  
}
```

- 5. Write a while loop that will scoop 3 scoops of ice cream for me and will let me know when I have run out of ice cream. Output the results to an alert window.**

A while loop that will scoop 3 scoops of ice cream for me and alert me when I have run out would look like this:

```
while(scoops > 0) {  
    document.write("Another scoop");  
    Scoops -= 1;  
}  
  
alert("Oh no, you have run out of ice cream!");
```

- 6. Explain the fundamental differences between output to the browser, to an alert window, and to the console. When would it be best to use each function? Show me an example in code of each function.**

The main difference between output to the browser and to the console is that when you output to the browser, you should do so to interact with the user, while when you output to the console, you should do so to help you troubleshoot code.

Output to the browser: `document.write("Hello, world!");`

Output to the console: `console.log("Hello, world!");`

- 7. What is the Document Object Model used for in JavaScript?**

In JavaScript, the Document Object Model is used to see its containing pages' data or content.

- 8. What does this code do? `setTimeout(wakeUpUser, 4000);`**

The code `setTimeout(wakeUpUser, 4000);` will allow us to run the function "wakeUpUser within 4000 milliseconds.

- 9. Write a line of code that will calculate the area of a circle. (Area = $\text{PI} * \text{Radius Squared}$)**

The code that will calculate the area of a circle will look as follows:

```
var area = PI * radius * radius;
```

10. Explain how JavaScript works and fits into the web page ecosystem.

The way JavaScript fits into the web page ecosystem is by allowing us to give behaviour to our web pages.