



University of Maryland College Park

Department of Computer Science

CMSC122 Fall 2024

Exam #1

FIRSTNAME, LASTNAME (PRINT IN UPPERCASE):

KEY

STUDENT ID (e.g. 123456789):

Instructions

- Please print your answers and use a pencil.
- This exam is a closed-book, closed-notes exam with a duration of 50 minutes and 100 total points.
- **Do not remove the exam's staple.** Removing it will interfere with the scanning process (even if you staple the exam again).
- Write your directory id (e.g., terps1, not UID) at the bottom of pages with **DirectoryId**.
- Provide answers on the provided lines or the rectangular areas.
- Do not remove any exam pages. Even if you don't use the extra pages for scratch work, return them with the rest of the exam.
- Your code must be efficient and as short as possible.
- If you continue a problem on the extra page(s) provided, make a note on that particular problem.
- **You must write your name and id at this point (we will not wait for you after time is up).**
- You must stop writing once time is up.

Grader Use Only

#1	Part #1 (Short Answer 2 pts each)	16
#2	Part #2 (Short Answer 3 pts each)	12
#3	HTML Table, Links, Image	24
#4	Nested List and CSS	24
#5	JS	24
Total	Total	100

Part #1 (Short Answer – 2 pts each)

1. Show how to declare a JavaScript variable and assign to it the String **JS is fun**.

let myVariable = "JS is fun"; //var or const is ok too

2. Write a CSS comment that says **CSS is fun**.

/* CSS is fun */

3. The **DNS** protocol translates a domain name into an IP address.

4. A CSS declaration has a **property** and a value.

5. The **div** html tag can be used to make a generic block level container for other html tags.

6. Circle just the selector in the following CSS rule: **p { color : blue; }**

7. An **h1** and an **p** element can never be in the same CSS **class**. True or False? **False**

8. Write a CSS rule such that all **** elements that descend from a **<p>** will be **bold**.

p span { font-weight: bold; }

Part #2 (Short Answer – 3 pts each)

9. Assume **num** is a variable that has been assigned a positive integer. Using **document.writeln** method show how you would display the remainder when **num** is divided by 2.

document.writeln(num % 2);

10. What are the 3 ways to include CSS into your html?

<ul style="list-style-type: none">Inline (with style attribute)	<ul style="list-style-type: none">Internal (with <style> tag in header)	<ul style="list-style-type: none">External (with a .css file linked in)
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11. What are the three types of HTML lists?

Ordered with 	Unororder with 	Definition list with <dl>
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12. In one line, write an html paragraph element that will say HTML is fun and will be blue.

<p style="color: blue;">HTML is fun</p>

Part #3 – HTML Table, Links, Image 24 Pts

13. Write just the code in the <body> you need to make the webpage below. It is a table with 3 rows. It has no <th> tags. The first row is a link that goes to <http://www.umd.edu>. The second row just has a picture called testudo.jpg and is in the same folder as your webpage. The alternate text for the image should be testudo. The last row has 3 cells with the text you see below. The border attribute should be 1. No CSS.



```
<table border = "1">
  <tr><td colspan = "3"><a href="http://www.umd.edu"> UMD</a></td></tr>
  <tr><td colspan = "3"> </td></tr>
  <tr><td>HTML</td><td>CSS</td><td>JS</td></tr>

</table>
```

Part #4 – Nested List and CSS 24Pts

14. Write just the code in the <body> you need to make the webpage below. It is a nested list. The tag that has the content blue should have its class attribute set to “blue”, and the tag that has the content green should have its id attribute set to “green”. After you write the code, on line 1 write a CSS rule to make the word blue show up in blue and the word green in green.

1. HTML

2. CSS

- blue
- green

3. JS

```
<ol>
  <li>HTML</li>
  <li>CSS
    <ul>
      <li class="blue">blue</li>
      <li id="green">green</li>
    </ul>
  </li>
  <li>JS</li>
</ol>
```

1. `.blue{color:blue;}`

2. `#green{color:green;}`

Part #5 – JS Code 24Pts

15. Write just the JS code in the `<script>` you need to make a script that will prompt for a number. If it is 10 or less, it will alert **Too small**. Otherwise, it gives you the area of the square using the input. Area is just the input multiplied by itself. For example, if the person inputs 15, the alert box will say: **Area is 225**. Output does not have to be in bold.

```
<script>
    "use strict";

    let len = prompt("Enter the length: ");
    if(len<=10)
        alert("Too small");
    else
        alert("Area is " +len * len);
```

```
</script>
```

LAST PAGE