



University of Maryland College Park

Department of Computer Science

CMSC122 Fall 2023

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)	12
#2	Part #2 (Short Answer 3 pts each)	15
#3	Simple Webpage	15
#4	HTML Table	21
#5	Nested List	21
#6	CSS	16
Total	Total	100

Part #1 (Short Answer – 2 pts each)

1. Write a **single line** JavaScript comment that says JS is fun.

//JS is fun

2. Write an HTML comment that says HTML is fun.

<!-- HTML is fun -->

3. The DNS protocol translates a domain name into a(n) **IP** address.

4. CSS stands for **cascading style** sheets.

5. What HTML tag do you use to make a subscript, like the 2 in H₂O? **<sub>**

6. Write a CSS rule such that all elements that descend from a <p> will be purple.

p span {color:purple;}

Part #2 (Short Answer – 3 pts each)

7. In class, we discussed how you can declare a JavaScript variable using the var keyword and another keyword. Using the other keyword (which is not const), declare a variable called num and assign to it 35.

let num = 35;

8. Using document.writeln method, show how you would display the output The answer is 35
You need to call the method with the string literal The answer is and concatenate to it num.

document.writeln("The answer is "+ num);

9. Write an HTML preformatted text element with the content Exam1 and having an id attribute with the value myId

<pre id = "myId"> Exam1 </pre>

10. What are the 3 ways to add CSS to your webpage:

1. **External file**

2. **Internal with style tag**

3. **Inline with style attribute**

11. In the CSS Box model, you have the following 4 parts:

1. Content

2. **padding**

3.**border**

4. **margin**

Part #3 – Simple Webpage 15 Pts

12. Write just the code in the <body> you need to make the webpage below. Welcome to UMD is a level one heading showing up in red (use the appropriate attribute that allows you to put in a CSS rule). The picture is called testudo.jpg and is in the same folder as your webpage. When you click on the picture, it goes to www.umd.edu. When you make the link, don't forget about the protocol. The alt attribute of the picture is set to Testudo and the title attribute is set to UMD Link.

Welcome to UMD



```
<h1 style="color:red" >Welcome to UMD</h1>
  <a href="http://www.umd.edu"></a>
```

Part #4 – HTML Table (NO CSS) 21Pts

13. Write just the code in the <body> you need to make the table seen below. The value of the border property in the table is 1. Note that Exam1 is bold because it is a table header.

Exam1		
Topics	Networks	HTML
	CSS	JS

```
<table border = "1">
```

```
    <tr> <th colspan="3">Exam1</th>    </tr>
```

```
    <tr> <td rowspan="2">Topics</td> <td>Networks</td> <td>HTML</td>    </tr>
```

```
    <tr> <td>CSS</td> <td>JS</td>    </tr>
```

```
</table>
```

Part #5 – HTML Nested Lists (NO CSS) 21Pts

14. Write just the code in the <body> you need to make the table seen below. It is an ordered list with the first 2 list items being unordered lists and the third item being a definition list. You don't need any HTML attributes to make the list below.

1. HTML

- Table
- List
- links

2. CSS

- Box Model
- Font
- Color

3. JS

Make the page interactive

```
<ol>
  <li>HTML
    <ul>
      <li>Table</li>
      <li>List</li>
      <li>links</li>
    </ul>
  </li>

  <li>CSS
    <ul>
      <li>Box Model</li>
      <li>Font</li>
      <li>Color</li>
    </ul>
  </li>
  <li>
    <dl>
      <dt>JS</dt>
      <dd>Make the page interactive</dd>
    </dl>
  </li>
</ol>
```

Part #6 –CSS 16 Pts

15. Simply write the color of each element on the line next to the element.

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    h1, h2 {color:blue;}
    .TypeA {color:green;}
    p.TypeA {color: yellow}
    p {color: red;}
    * {color: pink;}
    #TypeB {color:brown;}
  </style>
</head>

<body>

  <h1>Heading 1</h1>    blue

  <h2 class="TypeA" id="TypeB"> Heading 2</h2>. brown

  <p class="TypeA"> Line 1</p> yellow

  <p class="TypeC"> Line 2</p> red

  <h2> Heading 3</h2> blue

  <p class="TypeA" style="color:black"> Line 3</p> black

  <h3> Heading 4</h3> pink

  <p> Line 4</p> red

</body>
</html>
```

LAST PAGE