University of Maryland College Park
Department of Computer Science
CMSC122 Fall 2025
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)	24
#3	HTML Table, List, Links, Image	26
#4	Nested List	24
#5	JS	26
Total	Total	100

Part #1 (Short Answer – 2 pts each)

1. Write an HTML comment that says **`HTML is fun`**.

<!-- HTML is fun -->

2. URL stands for **Uniform Resource Locator**.

3. Circle just the property in the following CSS rule: **`p { color : blue; }`**

4. An element can be in more than one CSS **`class`**. True or False? True

5. In one line, write an HTML level 1 heading element that will say "Welcome" and will be centered using CSS (as an HTML attribute).

<h1 style="text-align: center;">Welcome</h1>

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6. Write a CSS rule that sets the background color of **all** elements to yellow using the universal selector.

* { background-color: yellow; }

Part #2 (Short Answer – 3 pts each)

7. Besides content, what are the 3 other parts of the CSS box model?

Padding	**Border**	**Margin**

8. What are the 3 ways to include CSS into your html? ("as an HTML attribute" is not the correct term)

Inline	**Internal**	**External**

9. What are the 3 required parts of an HTML document (the outer structure)?

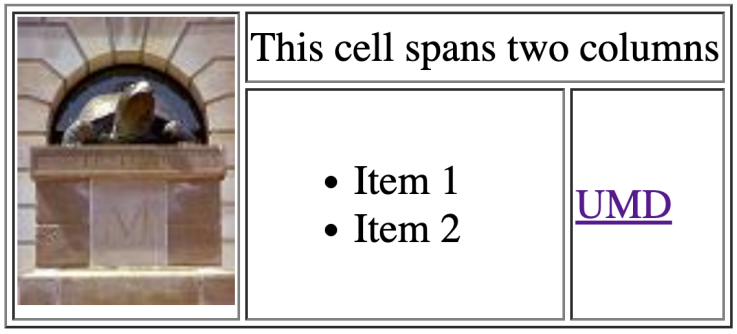
html	**head**	**body**

10. In one line, write an html paragraph element that will say HTML is fun. `HTML` should be bold using html, `is` should be blue using span and CSS (as an HTML attribute), and `fun` should be in italics using HTML.

** HTML is fun **

Part #2 – HTML Table, Links, List, Image 26 Pts

11. Write just the code in the <body> you need to make the webpage below. It is a table with 2 rows. It has no <th> tags. The link goes to https://www.umd.edu. The picture is called testudo.jpg and is in the same folder as your webpage. The alternate text for the image should be testudo. It spans 2 rows. The border attribute should be 1. No CSS.




```
<table border="1">
    <tr>
      <!-- Rowspan example -->
      <td rowspan="2">
        <img src="testudo.jpg" alt="testudo">
      </td>
      <!-- Colspan example -->
      <td colspan="2">This cell spans two columns</td>
    </tr>
    <tr>
      <td>
        <!-- Unordered list inside a cell -->
        <ul>
          <li>Item 1</li>
          <li>Item 2</li>
        </ul>
      </td>
      <td>
        <!-- Link inside a cell -->
        <a href="https://www.umd.edu">UMD</a>
      </td>
    </tr>
  </table>
```


Directory id:

Part #3 – Nested List 24 Pts

12. Write just the code in the `<body>` you need to make the webpage below. Programming Languages is a level 2 heading. The rest is a nested list (with the inner list being a definition list using the default indentation).

Programming Languages

1. JavaScript
   Use
      Web development
   Type
      Interpreted
2. Python
3. Java

```
<h2>Programming Languages</h2>
  <ol>
    <li>
      JavaScript
      <dl>
        <dt>Use</dt>
        <dd>Web development</dd>
        <dt>Type</dt>
        <dd>Interpreted</dd>
      </dl>
    </li>
    <li>Python</li>
    <li>Java</li>
  </ol>
```

Part #4 – JS Code 26 Pts

13. Write just the JS code in the `<script>` that will:

1. Prompt the user for two numbers. The first prompt should say `Enter first number:` and the second prompt should say `Enter second number:`.
2. Add the two numbers together to get the sum.
3. If the sum is negative, write to the webpage: `Sum is negative.`
4. Otherwise, write to the webpage: `Sum is non-negative.`

For example, if the inputs are 5 and 6, the page will say: Sum is non-negative. As another example, if the inputs are 5 and -6, the page will say: Sum is negative.

```
<script>
        "use strict";

         let num1 = Number(prompt("Enter first number:"));
        let num2 = Number(prompt("Enter second number:"));
        let sum = num1 + num2;

         if (sum < 0) {
             document.writeln("<p>Sum is negative.</p>");
         } else {
             document.writeln("<p>Sum is non-negative.</p>");
         }

</script>
```


Directory id:

LAST PAGE