

Name: Lara L. Alcuetas

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### CS 111 – FINAL REQUIREMENT

#### A. HTML program and it's equivalent inline CSS.

The screenshot shows a mobile browser interface. At the top, there are status icons for time (9:04), notifications, signal strength, battery level (83%), and connectivity. Below the status bar is the address bar with the URL [w3schools.com/html/tryit.](https://w3schools.com/html/tryit/). The main content area displays a green banner at the top with the text "Enjoy Full Access, including 70+ certifications and all resources" and a "Read more!" button. The w3schools logo is visible in the top right corner. Below the banner, the browser's toolbar includes icons for home, menu, save, refresh, and run, along with a "Run" button. The page content is a code editor showing an HTML document with inline CSS styles. The code creates a table with four columns: Websites, Certification, Tuition, and Top Courses. The table lists three rows: Freecode Camp (Yes, Free, Web Development and Design), Udemy (Yes, Paid, Python and Machine Learning), and Coursera (Yes, Free and Paid, IoT and AI). A summary row for "Total Courses" is present with the text "What are you waiting for? Get Started now for free". The rendered output below the code editor shows the same table structure with the data from the code. The entire page has a white background with black text and blue links.

```
<!DOCTYPE html>
<html>
<head>
    <title>Lara Alcuetas-Final Requirements</title>
</head>
<body>
    <h4 style="text-align: center; font-family: 'Times New Roman', serif; margin-bottom: 20px;">
        A summary of top sites with both paid and free courses
    </h4>
    <table border="1" style="width: 100%; border-collapse: collapse; font-family: 'Times New Roman', serif; text-align: center;">
        <thead>
            <tr>
                <th style="background-color: black; color: white; padding: 10px;">Websites</th>
                <th style="background-color: #8b0000; color: white; padding: 10px;">Certification</th>
                <th style="background-color: #8b0000; color: white; padding: 10px;">Tuition</th>
                <th style="background-color: #8b0000; color: white; padding: 10px;">Top Courses</th>
            </tr>
        </thead>
        <tbody>
            <tr>
                <td style="padding: 10px; background-color: #8b0000; color: white;">Freecode Camp</td>
                <td style="padding: 10px;">Yes</td>
                <td style="padding: 10px;">Free</td>
                <td style="padding: 10px;">Web Development and Design</td>
            </tr>
            <tr>
                <td style="padding: 10px; background-color: #8b0000; color: white;">Udemy</td>
                <td style="padding: 10px;">Yes</td>
                <td style="padding: 10px;">Paid</td>
                <td style="padding: 10px;">Python and Machine Learning</td>
            </tr>
            <tr>
                <td style="padding: 10px; background-color: #8b0000; color: white;">Coursera</td>
                <td style="padding: 10px;">Yes</td>
                <td style="padding: 10px;">Free and Paid</td>
                <td style="padding: 10px;">IoT and AI</td>
            </tr>
        </tbody>
        <tfoot>
            <tr>
                <td colspan="1" style="padding: 15px; background-color: #8b0000; color: white; font-weight: bold; font-style: italic;">
                    Total Courses
                </td>
                <td colspan="3" style="padding: 15px; background-color: black; color: white; font-weight: bold; font-style: italic;">
                    What are you waiting for? Get Started now for free
                </td>
            </tr>
        </tfoot>
    </table>

```

A summary of top sites with both paid and free courses

Websites	Certification	Tuition	Top Courses
Freecode Camp	Yes	Free	Web Development and Design
Udemy	Yes	Paid	Python and Machine Learning
Coursera	Yes	Free and Paid	IoT and AI
Total Courses	What are you waiting for? Get Started now for free		

## Equivalent inline CSS

1. For <h4> tag
  - text-align: center;
  - font-family: 'Times New Roman', serif;
  - margin-bottom: 20px;
2. For <table> tag
  - width: 100%;
  - border-collapse: collapse;
  - font-family: 'Times New Roman', serif;
  - text-align: center;
3. For <th> tags (Table Headers)
  - background-color: black;
  - color: white;
  - padding: 10px;
4. For <th> tags (Certification, Tuition, Top Courses)
  - background-color: #8b0000;
  - color: white;
  - padding: 10px;
5. For <td> tags (Data Cells – Row 1)
  - padding: 10px;
  - background-color: #8b0000;
  - color: white;
6. For <td> tags (Data Cells – Row 2 and 3)
  - padding: 10px;
  - background-color: #8b0000;
  - color: white;
7. For <td> tags (Data Cells – Row 2 and 3 Text)
  - padding: 10px;
  - color: white;
8. For Footer <td> (Total Courses, Last Row)
  - padding: 15px;
9. For Footer <td> (Last Column, Italic Text)
  - background-color: #8b0000;
  - color: white;
  - font-weight: bold;
  - padding: 15px;
  - background-color: black;
  - color: white;
  - font-weight: bold;
  - font-style: italic;

## B. Encoded code, output, and discussion.

The screenshot shows a mobile browser displaying a code editor and its corresponding output. The browser's status bar at the top indicates the time as 3:43 and battery level at 10%. The address bar shows the URL [w3schools.com/html/tryit.asp](https://www.w3schools.com/html/tryit.asp). Below the address bar is a toolbar with icons for home, refresh, search, and other functions. The main content area has a green 'Run' button in the top right corner. On the left, there is a code editor containing an HTML document. On the right, the output is displayed in a large, bold, black font.

**Specifying colors using RGB values**

```
<!DOCTYPE html>
<html>
  <head>
    <body>

      <h1>Specify colors using RGB values</h1>

      style="background-color:rgb(255, 0, 0);">rgb(255, 0, 0)
      </h2>
      <h2 style="background-color:rgb(0, 0, 255);">rgb(0, 0, 255)
      </h2>
      <h2 style="background-color:rgb(60, 179, 113);">rgb(60, 179, 113)</h2>
      <h2 style="background-color:rgb(238, 130, 238);">rgb(238, 130, 238)</h2>
      <h2 style="background-color:rgb(255, 165, 0);">rgb(255, 165, 0)
      </h2>
      <h2 style="background-color:rgb(106, 90, 205);">rgb(106, 90, 205)</h2>
    </body>
  </head>
</html>
```

The output text is displayed in five colored boxes, each containing a different RGB value:

- rgb(0, 0, 255) - Blue box
- rgb(60, 179, 113) - Green box
- rgb(238, 130, 238) - Pink box
- rgb(255, 165, 0) - Orange box
- rgb(106, 90, 205) - Purple box

<!DOCTYPE html>

- This line declares the document type as HTML. It tells the browser that the document is an HTML5 document.

<html>

- This tag marks the beginning of the HTML document.

<body>

- This tag marks the beginning of the document's body, which contains the visible content of the webpage.

<h1>Specify colors using RGB values</h1>

- This line defines a level 1 heading (h1) that introduces the topic of using RGB values to specify colors.

<h2 style="background-color:rgb(255, 0, 0);">rgb(255, 0, 0)</h2>

- This line defines a level 2 heading (h2) with a red background color.
- The style attribute is used to apply inline styles to the element.
- background-color:rgb(255, 0, 0); sets the background color to red using the RGB color model.
- The text inside the h2 tag displays the RGB value for red: rgb(255, 0, 0) .

<h2 style="background-color:rgb(0, 0, 255);">rgb(0, 0, 255)</h2>

- Similar to the previous line, this defines an h2 heading with a blue background color.

<h2 style="background-color:rgb(60, 179, 113);">rgb(60, 179, 113)</h2>

- This line defines an h2 heading with a green background color.

<h2 style="background-color:rgb(238, 130, 238);">rgb(238, 130, 238)</h2>

- This line defines an h2 heading with a pink background color.

<h2 style="background-color:rgb(255, 165, 0);">rgb(255, 165, 0)</h2>

- This line defines an h2 heading with an orange background color.

<h2 style="background-color:rgb(106, 90, 205);">rgb(106, 90, 205)</h2>

- This line defines an h2 heading with a purple background color.

</body>

- This tag marks the end of the HTML document's body.

</html> - This tag marks the end of the HTML document.