



WEB PROGRAMMING LAB EXERCISE-HTML [TABLES]

Lab assignment questions focused on HTML elements like `<table>`, `<tr>`, `<th>`, `<td>` etc:

1. E-Commerce Product Table

Create a product table for an e-commerce website:

- Columns: Product ID, Name, Category, Price, Discount, Final Price.
- Calculate the "Final Price" as $\text{Price} - (\text{Price} \times \text{Discount})$.
- Highlight products in different categories with unique background colors.

Bonus Challenge:

- Add a column with a star rating (1 to 5 stars) using special characters or Unicode symbols (e.g., ★).

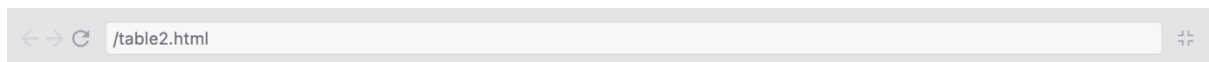
Sample Answer to Q1.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>E-Commerce Product Table</title>
</head>
<body>
  <h1>E-Commerce Product List</h1>
  <table border="1" cellspacing="0" cellpadding="5">
    <caption><strong>Product Details</strong></caption>
    <thead>
      <tr>
        <th>Product ID</th>
        <th>Name</th>
        <th>Category</th>
        <th>Price ($)</th>
        <th>Discount (%)</th>
        <th>Final Price ($)</th>
        <th>Rating</th>
      </tr>
    </thead>
    <tbody>
      <tr style="background-color: #f2f2f2;">
        <td>101</td>
        <td>Wireless Mouse</td>
        <td>Electronics</td>
        <td>25.00</td>
        <td>10</td>
        <td>22.50</td>
        <td>★★★★☆</td>
      </tr>
      <tr style="background-color: #fff0d8;">
        <td>102</td>
        <td>Coffee Mug</td>
        <td>Kitchen</td>
        <td>15.00</td>
        <td>5</td>
        <td>14.25</td>
        <td>★★★☆☆</td>
      </tr>
      <tr style="background-color: #f9f2f4;">
        <td>103</td>
        <td>Office Chair</td>
```



```
<td>Furniture</td>
<td>150.00</td>
<td>20</td>
<td>120.00</td>
<td>★★★★★</td>
</tr>
<tr style="background-color: #f2f2f2;">
<td>104</td>
<td>Desk Lamp</td>
<td>Electronics</td>
<td>30.00</td>
<td>15</td>
<td>25.50</td>
<td>★★★★☆</td>
</tr>
<tr style="background-color: #fff0d8;">
<td>105</td>
<td>Water Bottle</td>
<td>Kitchen</td>
<td>12.00</td>
<td>10</td>
<td>10.80</td>
<td>★★★☆☆</td>
</tr>
</tbody>
<tfoot>
<tr>
<td colspan="7" style="text-align: right;"><strong>Total Products: 5</strong></td>
</tr>
</tfoot>
</table>
</body>
</html>
```

Output:



E-Commerce Product List

Product Details						
Product ID	Name	Category	Price (\$)	Discount (%)	Final Price (\$)	Rating
101	Wireless Mouse	Electronics	25.00	10	22.50	★★★★☆
102	Coffee Mug	Kitchen	15.00	5	14.25	★★★★☆
103	Office Chair	Furniture	150.00	20	120.00	★★★★★
104	Desk Lamp	Electronics	30.00	15	25.50	★★★★☆
105	Water Bottle	Kitchen	12.00	10	10.80	★★★☆☆
Total Products: 5						

2. Multi-Level Organization Chart

Design a table to display a company's organization hierarchy:

- Rows: Departments (e.g., HR, Engineering, Marketing).
- Columns: Department Name, Manager, Number of Employees.
- Use `<colspan>` and `<rowspan>` to merge cells for common data (e.g., multiple managers in a department).



Bonus Challenge:

- Add a column showing each department's budget and the percentage of the total company budget.
-

3. Calendar Table

Create a monthly calendar using a table:

- Rows: Weeks.
- Columns: Days (Monday to Sunday).
- Highlight the current date using the `bgcolor` attribute.

Bonus Challenge:

- Add a column to display holidays with specific icons (e.g., 🎉 for events).
-

4. Flight Schedule Table

Design a flight schedule table for an airline:

- Columns: Flight Number, Destination, Departure Time, Arrival Time, Duration.
- Highlight rows where the destination is international with a unique background color.
- Add a column to indicate the flight status (On Time, Delayed, or Cancelled).

Bonus Challenge:

- Use `<abbr>` in the "Duration" column to display the duration in hours and minutes with a tooltip.
-

5. Grade Report Table

Build a grade report table for a class:

- Columns: Student ID, Name, Subjects (Math, Science, English), and Total Marks.
- Use `<rowspan>` to merge cells for students who scored the same total marks.
- Highlight the top 3 students using bold text or different background colors.

Bonus Challenge:

- Add a footer row displaying the class average for each subject.
-



6. Sales Report Table

Create a sales report table for a company:

- Columns: Region, Salesperson, Product, Quantity Sold, Unit Price, Total Sales.
- Calculate the "Total Sales" as $\text{Quantity} \times \text{Unit Price}$.
- Highlight regions with the highest sales using bold text or a different background color.

Bonus Challenge:

- Add a footer displaying the grand total of all sales.
-

7. Timetable for a Conference

Design a conference timetable:

- Rows: Time slots.
- Columns: Room Names.
- Use `<colspan>` for combined sessions and `<rowspan>` for long-duration sessions.
- Add a legend explaining the color codes for different session types (e.g., keynote, workshop).

Bonus Challenge:

- Include speaker names and session descriptions in tooltips using the `title` attribute.
-

8. Nested Table for Exam Schedule

Create a table displaying an exam schedule:

- Main table: Rows for dates and columns for time slots.
- Nested tables inside each cell to list subjects and their corresponding durations.
- Use different background colors for theoretical and practical exams.

Bonus Challenge:

- Add a column indicating the total number of exams on each date.
-

9. Restaurant Menu Table

Build a restaurant menu using a table:



- Columns: Dish Name, Category (Appetizer, Main Course, Dessert), Ingredients, Price.
- Use `<rowspan>` for dishes with similar ingredients across categories.
- Highlight vegetarian dishes using a specific icon (e.g., 🌱).

Bonus Challenge:

- Add a column for customer ratings using symbols (e.g., ★).

10. Sports League Table

Create a league table for a sports tournament:

- Columns: Team Name, Matches Played, Wins, Losses, Draws, Points.
- Sort the rows by points in descending order.
- Highlight the top 3 teams with bold text or a unique background color.

Bonus Challenge:

- Add a footer row displaying the total number of matches played by all teams combined

Extra Challenges

1. Use `<colgroup>` to group columns with similar data (e.g., numerical data).
2. Use `<caption>` to provide a meaningful title for each table.
3. Ensure accessibility by adding `scope`, `id`, and `headers` attributes to table elements.