**Program 2:**

**Develop the HTML page named as “Table.html” to display your class time table.**

**a) Provide the title as Time Table with table header and table footer, row-span and col-span etc.**

**b) Provide various colour options to the cells (Highlight the lab hours and elective hours with different**

**colours.)**

**c) Provide colour options for rows.**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Time Table</title>

<style>

body {

font-family: Arial, sans-serif;

line-height: 1.6;

margin: 0;

padding: 20px;

}

table {

width: 100%;

border-collapse: collapse;

}

th, td {

border: 1px solid #ddd;

padding: 8px;

text-align: center;

}

th {

background-color: #f2f2f2;

}

.lab-hours {

background-color: #ffcccb;

}

.elective-hours {

background-color: #90ee90;

}

.lunch {

background-color: #ffd700;

}

.odd-row {

background-color: #f8f8f8;

}

tfoot {

background-color: #e6e6e6;

font-weight: bold;

}

</style>

</head>

<body>

<table>

<thead>

<tr>

<th colspan="7">Class Time Table</th>

</tr>

<tr>

<th>Time</th>

<th>Monday</th>

<th>Tuesday</th>

<th>Wednesday</th>

<th>Thursday</th>

<th>Friday</th>

<th>Saturday</th>

</tr>

</thead>

<tbody>

<tr>

<td>9:00 - 10:00</td>

<td>Math</td>

<td>English</td>

<td>Science</td>

<td>History</td>

<td>Geography</td>

<td rowspan="6">No Classes</td>

</tr>

<tr class="odd-row">

<td>10:00 - 11:00</td>

<td>Physics</td>

<td>Chemistry</td>

<td>Biology</td>

<td class="elective-hours">Computer Science</td>

<td class="elective-hours">Art</td>

</tr>

<tr>

<td>11:00 - 12:00</td>

<td class="lab-hours" colspan="2">Physics Lab</td>

<td class="lab-hours" colspan="2">Chemistry Lab</td>

<td class="lab-hours">Biology Lab</td>

</tr>

<tr class="odd-row">

<td>12:00 - 13:00</td>

<td class="lunch" colspan="5">Lunch Break</td>

</tr>

<tr>

<td>13:00 - 14:00</td>

<td>Literature</td>

<td>Math</td>

<td>English</td>

<td>Physics</td>

<td>Chemistry</td>

</tr>

<tr class="odd-row">

<td>14:00 - 15:00</td>

<td class="elective-hours">Music</td>

<td class="elective-hours">Drama</td>

<td class="lab-hours" colspan="3">Computer Lab</td>

</tr>

</tbody>

<tfoot>

<tr>

<td colspan="7">\* Lab hours are highlighted in pink, elective hours in light green</td>

</tr>

</tfoot>

</table>

</body>

</html>

**Explanation**

Step 1: Document Structure

The document starts with the standard HTML5 declaration and structure.

The <head> section contains metadata and styling information.

The <body> section contains the visible content, which in this case is a table.

Step 2: Styling (CSS)

The <style> tag in the <head> section defines the appearance of the table and its elements.

It sets the font, adjusts spacing, and defines colors for different types of classes.

Specific classes are created for lab hours, elective hours, lunch, and alternating row colors.

Step 3: Table Structure

The table is created using the <table> tag.

It has three main parts: <thead> (table header), <tbody> (table body), and <tfoot> (table footer).

Step 4: Table Header (<thead>)

The first row spans all columns and displays "Class Time Table".

The second row shows the days of the week and a "Time" column.

Step 5: Table Body (<tbody>)

Each <tr> represents a row in the timetable.

The first column in each row shows the time slot.

Subsequent columns represent different subjects for each day.

Special formatting is applied to certain cells:

Lab hours are highlighted in pink.

Elective hours are highlighted in light green.

The lunch break spans across multiple columns.

The "Saturday" column spans multiple rows to show "No Classes".

Alternate rows have a slightly different background color for better readability.

Step 6: Special Cell Attributes

colspan is used to make cells span multiple columns (e.g., for labs and lunch).

rowspan is used to make the "Saturday" cell span multiple rows.

Classes are applied to cells for specific styling (e.g., "lab-hours", "elective-hours").

Step 7: Table Footer (<tfoot>)

The footer provides a legend explaining the color coding used in the table.

This HTML document demonstrates several important concepts:

Table structure and formatting

Use of CSS for styling

Cell spanning (both rows and columns)

Color coding for different types of classes

Responsive design considerations (though the table itself isn't responsive)