HTML Day 01 Hands on – Keerthivasan R

Problem 1

Assessment Goal: Check if learners understand basic HTML structure and content creation.

Hands-on Tasks:

1. Create a basic HTML page with proper structure (DOCTYPE, head, body)
2. Add a heading and a paragraph introducing yourself
3. Create an unordered list showing your hobbies
4. Create an ordered list showing daily routine steps
5. Create a simple table showing:
    - Student Name
    - Subject
    - Marks

Expected Outcome:
A static HTML page that displays structured content correctly in the browser.

CODE :

```
<!DOCTYPE html>
<!-- Defines the document type and tells the browser this is an HTML5 document -->

<html lang="en">
<!-- Root element of HTML page. lang="en" specifies English language -->

<head>
    <!-- Contains metadata like title, links, styles (not visible on webpage) -->

    <title>Problem Statement 1</title>
    <!-- Sets the title of the webpage (shown in browser tab) -->
</head>

<style>
    /* Styling section to design the table */

    table {
        border-collapse: collapse;
        /* Removes double borders between table cells */
    }

    table,
    th,
    td {
        border: 1px solid black;
        /* Adds border to table, table header, and table data */
    }

    th,
    td {
        padding: 5px;
```

```
        /* Adds space inside table cells */
    }
</style>

<body>
    <!-- Contains all visible content of the webpage -->

    <h1>Welcome to my profile</h1>
    <!-- Main heading of the webpage -->

    <p>
        <!-- Paragraph tag used to write text content -->
        Hello my name is keerthivasan, I love to build website and currently I'm learning
full-stack development course
        in upGrad
    </p>

    <h2>My hobbies</h2>
    <!-- Sub-heading for hobbies section -->

    <ul>
        <!-- Unordered list (bullet points) -->
        <li>Practice coding</li> <!-- List item -->
        <li>Learning new Course</li>
        <li>Playing carrom</li>
        <li>Listen to Music</li>
    </ul>

    <h2>My daily routine</h2>
    <!-- Sub-heading for routine section -->

    <ol>
        <!-- Ordered list (numbered list) -->
        <li>Wake at 7am</li>
        <li>Arrange things around me</li>
        <li>Attend class</li>
        <li>Practice and build projects</li>
    </ol>

    <h2>Student marks table</h2>
    <!-- Sub-heading for table section -->

    <table>
        <!-- Table tag used to create tabular data -->

        <tr>
            <!-- Table row -->
            <th>Student name</th> <!-- Table header cell -->
            <th>Subject</th>
            <th>Marks</th>
        </tr>

        <tr>
            <!-- Second row -->
```

```
            <td>Mahesh</td> <!-- Table data cell -->
            <td>Math</td>
            <td>50%</td>
        </tr>

        <tr>
            <td>Madhavan</td>
            <td>Science</td>
            <td>60%</td>
        </tr>

        <tr>
            <td>Suriya</td>
            <td>EVS</td>
            <td>90%</td>
        </tr>

    </table>
</body>

</html>
```

OUTPUT :

Welcome to my profile

Hello my name is keerthivasan , I love to build website and currenty i'm learning full-stack development course in upGrad

My hobbies

- Practice coding
- Learing new Course
- playing carrom
- Listen to Music

My daily routine

1. Wake at 7am
2. Arrange things around me
3. Attend class
4. Pratice and build proj

Student marks table

Student name	Subject	Marks
mahesh	Math	50%
Madhavan	Science	60%
Suriya	EVS	90%

Problem 2: Restaurant Menu Webpage (Level-1)

Scenario

A small restaurant wants a **basic menu webpage** to display their offerings online before moving to a full website.

📌 Requirements

Create an HTML page that displays:

1. **Restaurant Name** (Heading)
2. **About the Restaurant** (Paragraph)
3. **Menu Categories** (Unordered List)
4. **Price List** (Table)

📋 Table Structure

Item Name	Category	Price (₹)
Paneer Butter Masala	Main Course	220
Veg Biryani	Main Course	180
Masala Dosa	Breakfast	90
Cold Coffee	Beverages	120

🛠️ Technical Constraints

- Use proper **HTML boilerplate**
- Use at least **5 HTML elements**
- Use **HTML attributes** such as border, title, align
- Use:
    - <table>, <tr>, <th>, <td>
    - and

🎯 Learning Outcome

You should be able to:

- Build a complete HTML page structure
- Use tables for structured data

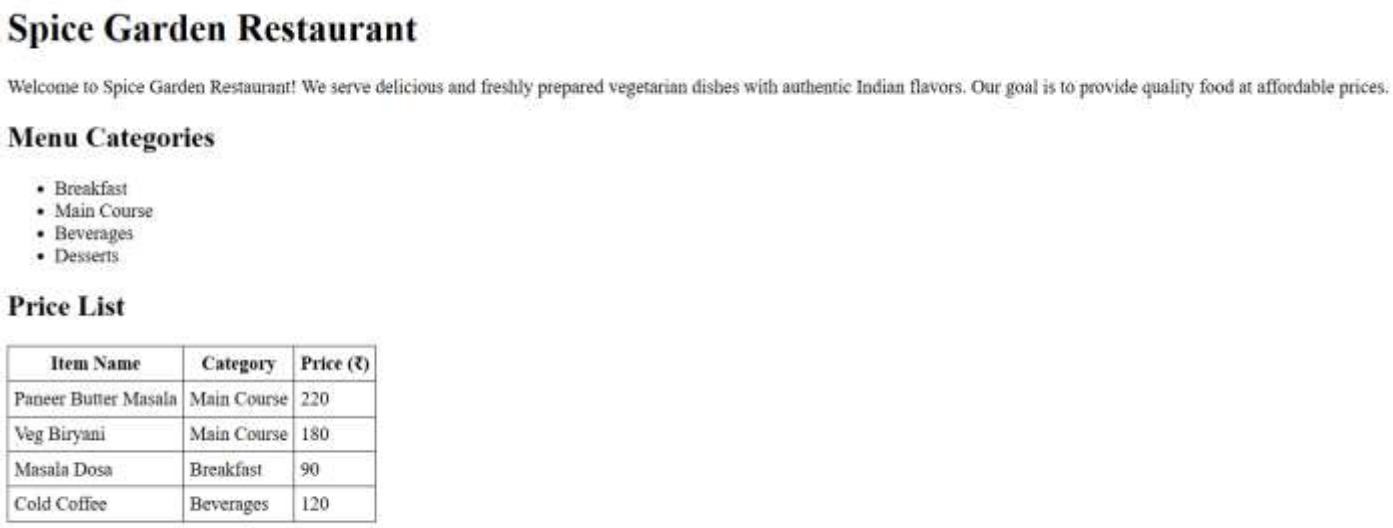
Use lists for grouped information

CODE :

```
<!DOCTYPE html>
<!-- Defines this document as HTML5 -->

<html>
<!-- Root element of the webpage -->

<head>
    <!-- Contains metadata like title, styles, links -->

    <title>Spice Garden Restaurant</title>
    <!-- Title displayed in browser tab -->

    <style>
        /* Styling section for the table */

        table {
            border-collapse: collapse;  /* Removes double borders */
        }

        table, th, td {
            border: 1px solid black;   /* Adds border to table and cells */
        }

        th, td {
            padding: 5px;   /* Adds space inside table cells */
        }
    </style>
</head>

<body>
    <!-- Visible content starts here -->

    <h1>Spice Garden Restaurant</h1>
    <!-- Main heading of the webpage -->

    <p title="About our restaurant">
        <!-- Paragraph describing the restaurant -->
        Welcome to Spice Garden Restaurant! We serve delicious and freshly
        prepared vegetarian dishes with authentic Indian flavors.
        Our goal is to provide quality food at affordable prices.
    </p>

    <h2>Menu Categories</h2>
    <!-- Sub-heading for categories -->

    <ul>
        <!-- Unordered list (bullet points) -->
        <li>Breakfast</li>
        <li>Main Course</li>
        <li>Beverages</li>
        <li>Desserts</li>
    </ul>
```

```
    <h2>Price List</h2>
    <!-- Sub-heading for table section -->

    <table>
        <!-- Table for displaying item details -->

        <tr>
            <!-- Table row -->
            <th>Item Name</th> <!-- Table header -->
            <th>Category</th>
            <th>Price (₹)</th>
        </tr>

        <tr>
            <td>Paneer Butter Masala</td> <!-- Table data -->
            <td>Main Course</td>
            <td>220</td>
        </tr>

        <tr>
            <td>Veg Biryani</td>
            <td>Main Course</td>
            <td>180</td>
        </tr>

        <tr>
            <td>Masala Dosa</td>
            <td>Breakfast</td>
            <td>90</td>
        </tr>

        <tr>
            <td>Cold Coffee</td>
            <td>Beverages</td>
            <td>120</td>
        </tr>
    </table>

</body>

</html>
```

OUTPUT :



Spice Garden Restaurant

Welcome to Spice Garden Restaurant! We serve delicious and freshly prepared vegetarian dishes with authentic Indian flavors. Our goal is to provide quality food at affordable prices.

Menu Categories

- Breakfast
- Main Course
- Beverages
- Desserts

Price List

Item Name	Category	Price (₹)
Paneer Butter Masala	Main Course	220
Veg Biryani	Main Course	180
Masala Dosa	Breakfast	90
Cold Coffee	Beverages	120

Problem 3: Personal Grocery Checklist (Level-1)

Scenario

You are building a **simple webpage for personal use** to plan your weekly grocery shopping. The page should clearly show **priority items** and **optional items**, so it's easy to decide what to buy first.

📌 Requirements

Create an HTML webpage that includes:

1. A **page title**:
   Weekly Grocery Checklist
2. A **main heading** displaying the same title.
3. An **Ordered List** showing **high-priority grocery items**, such as:
   - Rice
   - Milk
   - Vegetables
   - Cooking Oil
4. An **Unordered List** showing **optional or non-essential items**, such as:
   - Snacks
   - Ice cream
   - Soft drinks

🛠️ Technical Constraints

- Use proper **HTML boilerplate**:
  - <!DOCTYPE html>
  - <html>, <head>, <body>
- Use:
  - and <ul> correctly
  - for each item
- Add at least **one HTML attribute** (example: title)
- Ensure **proper indentation and readability**

🎯 Learning Outcome

You will be able to:

- Create structured content using HTML lists
- Choose the correct list type based on real-world requirements
- Understand how HTML represents **logical order and grouping**
- Build confidence in writing basic but meaningful HTML pages

CODE:

```
<!DOCTYPE html>
<!-- Declares this document as HTML5 -->

<html>
<!-- Root element that contains the entire webpage -->

<head>
    <!-- Contains metadata like title, links, styles (not visible on page) -->

    <title>Weekly Grocery Checklist</title>
    <!-- Title shown in browser tab -->
</head>

<body>
    <!-- Contains all visible content of the webpage -->

    <h1>
        Weekly Grocery Checklist
    </h1>
    <!-- Main heading of the webpage -->

    <h2>High-Priority Items</h2>
    <!-- Sub-heading for important grocery items -->

    <ol>
```

```
        <!-- Ordered list (numbered list) used for priority items -->
        <li>Rice</li> <!-- List item -->
        <li>Milk</li>
        <li>Vegetables</li>
        <li>Cooking Oil</li>
    </ol>

    <h2>Optional Items</h2>
    <!-- Sub-heading for optional items -->

    <ul>
        <!-- Unordered list (bullet list) used for non-priority items -->
        <li>Snacks</li> <!-- List item -->
        <li>Ice cream</li>
        <li>Soft drinks</li>
    </ul>

</body>

</html>
```

OUTPUT:

Problem 4: Employee Onboarding Page (Level-2)

Scenario

A company wants a **basic onboarding page** for new employees that HR can later style using CSS.

📌 Requirements

Use Semantic HTML:

- <header> → Company name & welcome message
- <section> → Employee details
- <article> → Company policies

- <footer> → Contact information

Content Structure

1. **Employee Information (Table)**
    - Employee ID
    - Name
    - Department
    - Joining Date
2. **Company Policies (Ordered List)**
    - Working hours
    - Leave policy
    - Code of conduct
3. **Facilities Provided (Unordered List)**
    - Laptop
    - Internet access
    - Training materials

🛠️ Technical Constraints

- Use **semantic tags only** (no for layout)
- Add **meaningful attributes** (title, lang, etc.)
- Proper indentation & readability

🎯 Learning Outcome

Learners should be able to:

- Explain **why semantic HTML matters**
- Differentiate between structural and non-structural tags
- Build readable, SEO-friendly HTML

CODE :

```
<!DOCTYPE html>
<!-- Defines HTML5 document type -->

<html lang="en">
<!-- Root element. lang="en" specifies English language -->

<head>
    <!-- Contains metadata (not visible on webpage) -->

    <meta charset="UTF-8">
```

```
    <!-- Supports all special characters like ₹, emojis, etc -->

    <title>Employee Onboarding Page</title>
    <!-- Title shown in browser tab -->

    <style>
        /* Styling for table */

        table {
            border-collapse: collapse; /* Removes double borders */
        }

        table, td, th {
            border: 1px solid black; /* Adds border */
        }

        th, td {
            padding: 5px; /* Adds spacing inside cells */
        }
    </style>
</head>

<body>
    <!-- All visible content comes inside body -->

    <header title="Company Introduction">
        <!-- Header section used for introductory content -->
        <h1>ABC Technologies Pvt. Ltd.</h1>
        <p>Welcome to the company. We're excited to have you on board.</p>
    </header>

    <section id="employee-info">
        <!-- Section groups related content -->
        <h2>Employee Information</h2>

        <table title="Employee details table">
            <!-- Table used for structured employee data -->

            <tr>
                <th>EID</th> <!-- Table header -->
                <th>Name</th>
                <th>Department</th>
                <th>Date of Joining</th>
            </tr>

            <tr>
                <td>101</td> <!-- Table data -->
                <td>Virat Kohli</td>
                <td>SDE</td>
                <td>10-02-2025</td>
            </tr>

            <tr>
                <td>102</td>
```

```
                <td>MS Dhoni</td>
                <td>Manager</td>
                <td>11-02-2025</td>
            </tr>

            <tr>
                <td>103</td>
                <td>Rohit Sharma</td>
                <td>Vice Chairman</td>
                <td>12-02-2025</td>
            </tr>
        </table>
    </section>

    <article title="Company Policies">
        <!-- Article represents independent content like policies -->
        <h2>Company Policies</h2>
        <ol>
            <!-- Ordered list for rules -->
            <li>Working Hours: 9 AM to 6 PM</li>
            <li>Leave Policy: 12 paid leaves per year</li>
        </ol>
    </article>

    <section>
        <!-- Another grouped section -->
        <h2>Facilities Provided</h2>
        <ul>
            <!-- Unordered list -->
            <li>Laptop</li>
            <li>Cab Service</li>
        </ul>
    </section>

    <footer>
        <!-- Footer contains contact details or closing info -->
        <h2>Contact Information</h2>
        <p>Contact HR: hr@abctechnologies.com</p>
        <p>Phone: +91 9999955555</p>
    </footer>

</body>

</html>
```

OUTPUT :

ABC Technologies Pvt. Ltd.

Welcome to the company. We're excited to have you on board.

Employee Information

EID	Name	Department	Date of Joining
101	Virat Kohli	SDE	10-02-2025
102	MS Dhoni	Manager	11-02-2025
103	Rohit Sharma	Vice Chairman	12-02-2025

Company Policies

Company Polici

1. Working Hours: 9 AM to 6 PM
2. Leave Policy: 12 paid leaves per year

Facilities Provided

- Laptop
- Cab Service

Contact Information

Contact HR: hr@abctechnologies.com

Phone: +91 9999955555

Problem 5: College Department Information Page (Level-2)

Scenario

A college wants to create a **basic informational webpage** for one of its departments (e.g., Computer Science, Information Technology).

The page will be used by **students and parents** to understand faculty details, subjects offered, and the weekly timetable before the site is enhanced with CSS and backend features.

📌 Requirements

Create an HTML webpage that includes the following sections:

1. **Header**
    - Department Name

    - College Name
2. **Section 1: Faculty Details**
    - Display faculty information in a **table** with columns:
        - Faculty Name
        - Designation
        - Subject Handled
3. **Section 2: Subjects Offered**
    - Display the list of subjects using an **unordered list**
4. **Section 3: Weekly Timetable**
    - Display timetable details in a **table** with columns:
        - Day
        - Subject
        - Time Slot
5. **Footer**
    - College address
    - Contact information

🛠️ Technical Constraints

- Use proper **HTML document structure**:
    - <!DOCTYPE html>
    - <html>, <head>, <body>
- Use **semantic HTML elements**:
    - <header>, <section>, <footer>
- Use:
    - <table>, <tr>, <th>, <td>
    - and
- Add meaningful **HTML attributes** such as lang or title
- Avoid CSS and JavaScript (HTML only)

🎯 Learning Outcome

You will be able to:

- Build real-world HTML pages with structured content
- Understand how semantic HTML improves readability and maintenance

- Organize information logically using tables and lists
- Prepare HTML content that is ready for CSS styling and backend integration

CODE :

```
<!DOCTYPE html>
<!-- Declares HTML5 document type -->

<html lang="en">
<!-- Root element of webpage -->

<head>
    <meta charset="UTF-8">
    <!-- Supports special characters -->

    <title>CSE Dept - ABC College</title>
    <!-- Title shown in browser tab -->

    <style>
        /* Table styling */

        table {
            border-collapse: collapse;
            /* Removes double borders */
        }

        table,
        td,
        th {
            border: 1px solid black;
            /* Adds border */
        }

        td,
        th {
            padding: 5px;
            /* Adds spacing */
        }
    </style>
</head>

<body>
    <!-- Visible content starts here -->

    <header>
        <!-- Header section for department title -->
        <h1>Department of CSE</h1>
        <h2>ABC College of Engineering</h2>
    </header>

    <section>
        <!-- Section for Faculty Details -->
        <h2>Faculty Details</h2>
```

```
    <table>
        <tr>
            <th>Faculty Name</th>
            <th>Designation</th>
            <th>Subject Handled</th>
        </tr>

        <tr>
            <td>Balaji</td>
            <td>Professor</td>
            <td>CCNA</td>
        </tr>

        <tr>
            <td>Ramanan</td>
            <td>Assistant Professor</td>
            <td>DBMS</td>
        </tr>

        <tr>
            <td>Imran</td>
            <td>Lecturer</td>
            <td>Mobile Computing</td>
        </tr>
    </table>
</section>

<section>
    <!-- Subjects offered -->
    <h2>Subjects Offered</h2>

    <ul>
        <li>CCNA</li>
        <li>DBMS</li>
        <li>Mobile Computing</li>
        <li>Operating Systems</li>
        <li>SDLC</li>
    </ul>
</section>

<section>
    <!-- Weekly timetable -->
    <h2>Weekly Timetable</h2>

    <table>
        <tr>
            <th>Day</th>
            <th>Subject</th>
            <th>Time Slot</th>
        </tr>

        <tr>
            <td>Monday</td>
```

```
                <td>CCNA</td>
                <td>9:00 AM – 10:30 AM</td>
            </tr>

            <tr>
                <td>Tuesday</td>
                <td>DBMS</td>
                <td>10:30 AM – 12:00 PM</td>
            </tr>

            <tr>
                <td>Wednesday</td>
                <td>Mobile Computing</td>
                <td>1:00 PM – 2:30 PM</td>
            </tr>

            <tr>
                <td>Thursday</td>
                <td>Operating Systems</td>
                <td>2:30 PM – 4:00 PM</td>
            </tr>

            <tr>
                <td>Friday</td>
                <td>SDLC</td>
                <td>10:30 AM – 12:00 PM</td>
            </tr>
        </table>
    </section>

    <br>
    <hr>
    <!-- Horizontal line to separate footer -->

    <footer>
        <!-- Footer contains contact details -->
        <h2>Address:</h2>
        <address>
            ABC College of Engineering <br>
            123 XYZ Park, Chennai, Tamil Nadu <br>
            Contact: +91 9999955555 <br>
            Email: info@abccollege.com
        </address>
    </footer>

</body>

</html>
```

OUTPUT:

Department of CSE

ABC College of Engineering

Faculty Details

Faculty Name	Designation	Subject Handled
Balaji	Professor	CCNA
Ramanan	Assistant Professor	DBMS
Imran	Lecturer	Mobile Computing

Subjects Offered

- CCNA
- DBMS
- Mobile Computing
- Operating Systems
- SDLC

Weekly Timetable

Day	Subject	Time Slot
Monday	CCNA	9:00 AM – 10:30 AM
Tuesday	DBMS	10:30 AM – 12:00 PM
Wednesday	Mobile Computing	1:00 PM – 2:30 PM
Thursday	Operating Systems	2:30 PM – 4:00 PM
Friday	SDLC	10:30 AM – 12:00 PM

Address:

ABC College of Engineering
123 XYZ Park, Chennai, Tamil Nadu
Contact: +91 9999955555
Email: info@abccollege.com