Name: Likhith B A
Reg. No: 23BCE1098

Experiment 05

HTML Semantic tags, Frames and Media Elements

Question 01

Code:

Main Page:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>23BCE1098 Frames</title>
</head>
<frameset rows="20%,*,15%">
    <!-- Header Frame -->
    <frame src="header.html" name="header"> </frame>

    <frameset cols="15%,*,15%">
        <!-- Navigation Frame -->
        <frame src="navigation.html" name="navigation"> </frame>

        <!-- Main Content Frame -->
        <frame src="content.html" name="content"> </frame>

        <!-- Aside Frame -->
        <frame src="aside.html" name="aside"> </frame>
    </frameset>

    <!-- Footer Frame -->
    <frame src="footer.html" name="footer"> </frame>
</frameset>
</html>
```

Content Page:

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Professional Resume</title>
</head>

<body>

  <br>
  <section id="about-me">
    <h2>About Me</h2>
    <p>A motivated software engineer with 5+ years of experience in building scalable web
applications.</p>
    <figure align="center">
      <img src="profile.png" alt="Profile Photo" width="150">
      <figcaption>John Doe - Software Engineer</figcaption>
    </figure>
  </section>

  <br>
  <section id="education">
    <h2>Education</h2>
    <article>
      <h3>Bachelor of Technology in Computer Science</h3>
      <p>XYZ University, 2015 - 2019</p>
    </article>
  </section>

  <br>
  <section id="experience">
    <h2>Experience</h2>
    <article>
      <h3>Software Engineer</h3>
      <p>ABC Corporation, 2019 - Present</p>
      <ul>
        <li>Developed and deployed web applications using JavaScript, Node.js, and Python.</li>
        <li>Optimized system performance, reducing load time by 30%.</li>
      </ul>
    </article>
  </section>

  <br>
```

```html
<section id="skills">
  <h2>Skills</h2>
  <article>
    <h3>Proficiency Levels</h3>
    <p>Programming:</p>
    <progress value="80" max="100"></progress>
    <p>Problem Solving:</p>
    <progress value="70" max="100"></progress>
    <p>Project Management:</p>
    <progress value="60" max="100"></progress>
  </article>
</section>

<br>
<section>
  <h2>Achievements</h2>
  <meter value="85" min="0" max="100">85%</meter> Certification in Advanced Programming
</section>

<br>
<section>
  <details>
    <summary>Additional Information</summary>
    <p>Hobbies: Hiking, Reading, Traveling</p>
    <p>Future Goals: To contribute to open-source projects and mentor aspiring developers.</p>
  </details>
</section>
</body>
</html>
```

Header Page:

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Header</title>
</head>

<body>
  <header align="center">
    <h1><b><u>My Professional Resume</u></b></h1>
    <h1>John Doe</h1>
    <p>Software Engineer | Problem Solver | Innovator</p>
  </header>
</body>
</html>
```

Footer Page:

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Footer</title>
</head>

<body>
  <footer align="center">
    <p>&copy; 2025 John Doe. All rights reserved.</p>
    <p>Contact: johndoe@example.com | Phone: +123-456-7890</p>
    <p>LinkedIn: <a href="#">linkedin.com/in/johndoe</a></p>
  </footer>
</body>
</html>
```

Navigation Page:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Navigation</title>
</head>
<body>
  <nav>
    <ul>
      <li><a href="content.html#about-me" target="content-frame"><font size="5">About Me</font></a></li>
      <li><a href="content.html#education" target="content-frame"><font size="5">Education</font></a></li>
      <li><a href="content.html#experience" target="content-frame"><font size="5">Experience</font></a></li>
      <li><a href="content.html#skills" target="content-frame"><font size="5">Skills</font></a></li>
    </ul>
  </nav>
</body>
</html>
```

Aside Page:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Aside</title>
</head>
<body>
  <aside>
    <h2>Quick Facts</h2>
    <ul>
      <li>Certified in Full-Stack Development</li>
      <li>5+ years of industry experience</li>
      <li>Proficient in JavaScript, Python, and Node.js</li>
    </ul>
  </aside>
</body>
</html>
```

Output:

My Professional Resume

John Doe

Software Engineer | Problem Solver | Innovator

- About Me
- Education
- Experience
- Skills

About Me

A motivated software engineer with 5+ years of experience in building scalable web applications.

John Doe - Software Engineer

Education

Bachelor of Technology in Computer Science

XYZ University, 2015 - 2019

Experience

Quick Facts

- Certified in Full-Stack Development
- 5+ years of industry experience
- Proficient in JavaScript, Python, and Node.js

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Contact: johndoe@example.com | Phone: +123-456-7890

LinkedIn: linkedin.com/in/johndoe

My Professional Resume

John Doe

Software Engineer | Problem Solver | Innovator

- About Me
- Education
- Experience
- Skills

ABC Corporation, 2019 - Present

- Developed and deployed web applications using JavaScript, Node.js, and Python.
- Optimized system performance, reducing load time by 30%.

Skills

Proficiency Levels

Programming:

Problem Solving:

Project Management:

Achievements

Certification in Advanced Programming

▶ Additional Information

Quick Facts

- Certified in Full-Stack Development
- 5+ years of industry experience
- Proficient in JavaScript, Python, and Node.js

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Contact: johndoe@example.com | Phone: +123-456-7890

LinkedIn: linkedin.com/in/johndoe

Question 02

Code:

Main Page:

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>23BCE1098 Media Elements</title>
</head>
<frameset cols="20%,*">
  <frame src="left.html"></frame>
  <frame src="right.html"></frame>
</frameset>
</html>
```

House Page:

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <svg width="200" height="300" xmlns="http://www.w3.org/2000/svg">
    <polygon points="50,100 150,100 100,50" fill="red" stroke="black" stroke-width="1" />
    <circle cx="100" cy="80" r="10" fill="yellow" />
    <rect x="50" y="100" width="100" height="150" fill="brown" stroke="black" stroke-width="1"/>
    <rect x="60" y="120" width="30" height="30" fill="lightblue" stroke="black" stroke-width="1"/>
    <rect x="110"y="120" width="30" height="30" fill="lightblue"stroke="black" stroke-width="1"/>
 <rect x="85"y="190"width="30" height="60" fill="saddlebrown"stroke="black" stroke-width="1"/>
    <rect x="75" y="250" width="50" height="10" fill="gray" />
    <rect x="80" y="260" width="40" height="10" fill="darkgray" />
    <polygon points="140,50 145,65 160,65 148,75 152,90 140,80 128,90 132,75 120,65 135,65"
fill="yellow" />
    <path d="M170,50 A15,15 0 1,1 150,50 A10,10 0 1,0 170,50" fill="yellow" />
  </svg>
</body>
</html>
```

Right Page:

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <div id="svg">
    <h1>My House using SVG</h1>
    <iframe src="house.html" title="SVG Content" width="400" height="400"></iframe>
  </div>
</body>
</html>
```

Left Page:

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <div id="audio">
    <h2>Audio</h2>
    <audio controls>
      <source src="audio.mp3" type="audio/mpeg">
      Your browser does not support the audio element.
    </audio>
  </div>

  <div id="video">
    <h2>Video</h2>
    <video controls>
      <source src="video.mp4" type="video/mp4">
      Your browser does not support the video element.
    </video>
  </div>

  <div>
    <canvas id="laptopCanvas" width="400" height="300"></canvas>
```

```
    </div>
  <script>
    const canvas = document.getElementById('laptopCanvas');
    const ctx = canvas.getContext('2d');

    const gradient = ctx.createLinearGradient(0, 0, 0, canvas.height);
    gradient.addColorStop(0, '#6a0d00');
    gradient.addColorStop(1, '#ff0000');
    ctx.fillStyle = gradient;
    ctx.fillRect(0, 0, canvas.width, canvas.height);

    ctx.fillStyle = '#d3d3d3';
    ctx.fillRect(100, 230, 200, 15);

    ctx.fillStyle = '#000000';
    ctx.fillRect(110, 50, 180, 150);

    ctx.lineWidth = 5;
    ctx.strokeStyle = '#4d4d4d';
    ctx.strokeRect(110, 50, 180, 150);

    ctx.beginPath();
    ctx.arc(200, 125, 50, 0, 2 * Math.PI);
    ctx.fillStyle = 'rgba(255, 255, 0, 0.2)';
    ctx.fill();

    ctx.beginPath();
    ctx.arc(200, 125, 40, 0, 2 * Math.PI);
    ctx.fillStyle = 'rgba(255, 255, 0, 0.4)';
    ctx.fill();
    ctx.beginPath();
    ctx.arc(200, 125, 30, 0, 2 * Math.PI);
    ctx.fillStyle = 'rgba(255, 255, 0, 0.6)';
    ctx.fill();
    ctx.fillStyle = '#a9a9a9';
    ctx.fillRect(180, 215, 40, 15);
  </script>
  </body>
  </html>
```
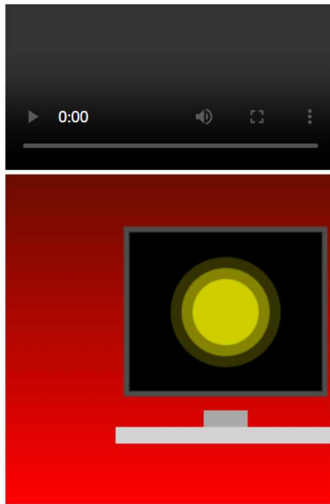
Output:

Audio

Video

My House using SVG