CSS Flexbox & Responsiveness Practice Challenges

**🔹 Flexbox Challenges**

**1. Responsive Navigation Bar**

* Create a **flex container** with logo (left) and menu items (right).
* On desktop: items appear in a row.
* On mobile: menu items stack vertically under the logo.

**2. Equal Height Cards**

* Create **3 cards** inside a flex container.
* Each card should stretch to equal height, regardless of content length.

**3. Sidebar + Content Layout**

* Left: sidebar (200px).
* Right: content area (flexible, fills remaining space).
* On mobile: sidebar should move **above** the content.

**4. Justify & Align Variations**

* Create 6 boxes inside a flex container.
* Try these alignments:
  + justify-content: space-between
  + align-items: center
  + flex-wrap: wrap (so boxes go to the next line on smaller screens).

**5. Responsive Footer**

* Create a footer with **3 sections** (About, Links, Contact).
* On desktop: all side by side.
* On mobile: stack them vertically.

**🔹 Responsiveness Challenges**

**1. Media Query Breakpoints**

* Make a container with 2 columns.
* At min-width: 768px → show as **side by side**.
* Below 768px → show as **stacked**.

**2. Image Gallery**

* Make a responsive image grid:
  + Desktop: 4 images per row.
  + Tablet: 2 images per row.
  + Mobile: 1 image per row.

**3. Responsive Hero Section**

* Create a hero with a **text block (left)** and **image (right)**.
* On smaller screens, image should move **below the text**.

**4. Flexbox Centered Login Form**

* Create a login form that is **centered both vertically and horizontally**.
* On small screens, form should shrink to fit.

**5. Responsive Pricing Table**

* Create 3 pricing cards in a row (Basic, Pro, Premium).
* On desktop → 3 in one row.
* On mobile → cards stack vertically.

# Flexbox Challenges

## 1. Responsive Navigation Bar

<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Responsive Nav</title>  
 <style>  
 /\* Your CSS here \*/  
 </style>  
</head>  
<body>  
 <nav class="navbar">  
 <div class="logo">Logo</div>  
 <div class="menu">  
 <a href="#">Home</a>  
 <a href="#">About</a>  
 <a href="#">Services</a>  
 <a href="#">Contact</a>  
 </div>  
 </nav>  
</body>  
</html>

## 2. Equal Height Cards

<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Equal Height Cards</title>  
 <style>  
 /\* Your CSS here \*/  
 </style>  
</head>  
<body>  
 <div class="card-container">  
 <div class="card">Short text</div>  
 <div class="card">A little longer text that should still match height.</div>  
 <div class="card">Some text<br>with multiple lines<br>to test height.</div>  
 </div>  
</body>  
</html>

## 3. Sidebar + Content Layout

<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Sidebar Layout</title>  
 <style>  
 /\* Your CSS here \*/  
 </style>  
</head>  
<body>  
 <div class="layout">  
 <aside class="sidebar">Sidebar</aside>  
 <main class="content">Main Content</main>  
 </div>  
</body>  
</html>

## 4. Justify & Align Variations

<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Flex Alignments</title>  
 <style>  
 /\* Your CSS here \*/  
 </style>  
</head>  
<body>  
 <div class="flex-container">  
 <div class="box">1</div>  
 <div class="box">2</div>  
 <div class="box">3</div>  
 <div class="box">4</div>  
 <div class="box">5</div>  
 <div class="box">6</div>  
 </div>  
</body>  
</html>

## 5. Responsive Footer

<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Responsive Footer</title>  
 <style>  
 /\* Your CSS here \*/  
 </style>  
</head>  
<body>  
 <footer class="footer">  
 <div class="about">About</div>  
 <div class="links">Links</div>  
 <div class="contact">Contact</div>  
 </footer>  
</body>  
</html>

# Responsiveness Challenges

## 1. Media Query Breakpoints

<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Two Column Responsive</title>  
 <style>  
 /\* Your CSS here \*/  
 </style>  
</head>  
<body>  
 <div class="container">  
 <div class="column">Column 1</div>  
 <div class="column">Column 2</div>  
 </div>  
</body>  
</html>

## 2. Image Gallery

<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Responsive Gallery</title>  
 <style>  
 /\* Your CSS here \*/  
 </style>  
</head>  
<body>  
 <div class="gallery">  
 <img src="https://via.placeholder.com/150" alt="img1">  
 <img src="https://via.placeholder.com/150" alt="img2">  
 <img src="https://via.placeholder.com/150" alt="img3">  
 <img src="https://via.placeholder.com/150" alt="img4">  
 <img src="https://via.placeholder.com/150" alt="img5">  
 <img src="https://via.placeholder.com/150" alt="img6">  
 </div>  
</body>  
</html>

## 3. Responsive Hero Section

<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Responsive Hero</title>  
 <style>  
 /\* Your CSS here \*/  
 </style>  
</head>  
<body>  
 <section class="hero">  
 <div class="text">Hero Text Content</div>  
 <div class="image"><img src="https://via.placeholder.com/300" alt="Hero"></div>  
 </section>  
</body>  
</html>

## 4. Flexbox Centered Login Form

<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Centered Login</title>  
 <style>  
 /\* Your CSS here \*/  
 </style>  
</head>  
<body>  
 <div class="login-container">  
 <form class="login-form">  
 <h2>Login</h2>  
 <input type="text" placeholder="Username">  
 <input type="password" placeholder="Password">  
 <button type="submit">Submit</button>  
 </form>  
 </div>  
</body>  
</html>

## 5. Responsive Pricing Table

<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Pricing Table</title>  
 <style>  
 /\* Your CSS here \*/  
 </style>  
</head>  
<body>  
 <div class="pricing">  
 <div class="card">Basic</div>  
 <div class="card">Pro</div>  
 <div class="card">Premium</div>  
 </div>  
</body>  
</html>