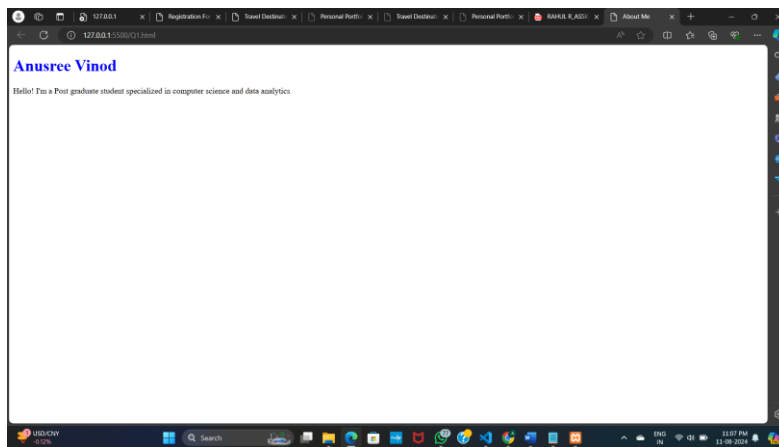


HTML

1.1 Create a simple HTML page that displays your name and a brief introduction about yourself. Use inline styles to change the color of your name.

```
<!DOCTYPE html>
<html>
<head>
  <title>About Me</title>
</head>
<body>
  <h1 style="color: blue;">Anusree Vinod</h1>
  <p>Hello! I'm a Post graduate student specialized in computer science and data analytics</p>
</body>
</html>
```



1.2 Create an HTML page for a simple registration form. Include input fields for name, email, and password. Use the align attribute to center the form fields.

```
<!DOCTYPE html>
<html>
<head>
  <title>Registration Form</title>
</head>
<body>
  <h1 align="center">Registration Form</h1>
  <form align="center">
    <table align="center">
      <tr>
        <td>Name:</td>
        <td><input type="text" name="name" required></td>
      </tr>
      <tr>
        <td>Email:</td>
        <td><input type="email" name="email" required></td>
      </tr>
      <tr>
        <td>Password:</td>
```

```

        <td><input type="password" name="password" required></td>
    </tr>
    <tr>
        <td colspan="2"><input type="submit" value="Register"></td>
    </tr>
</table>
</form>
</body>
</html>

```

Registration Form

Name:

Email:

Password:

1.3 Develop an HTML page for a travel destination. Include a header with a navigation menu, a main section with a hero image and destination information, and a footer with social media links. Use the width and height attributes to set the size of the hero image.

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Travel Destination</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <header>
        <nav>
            <ul>
                <li><a href="#home">Home</a></li>
                <li><a href="#about">About</a></li>
                <li><a href="#contact">Contact</a></li>
            </ul>
        </nav>
    </header>
    <main>
        <section class="hero">
            
            <h1>Welcome to Bali, Indonesia</h1>
            <p>Bali is a tropical paradise known for its beautiful beaches, temples, and vibrant culture.</p>
        </section>
    </main>

```

```

<section class="destination-info">
  <h2>About Bali</h2>
  <p>Bali is a province of Indonesia and is known for its beautiful beaches, temples, and vibrant culture. The island is home to many ancient temples, including the famous Tanah Lot temple, which is perched on a rock in the sea.</p>
  <p>Bali is also known for its beautiful beaches, including Kuta Beach, Seminyak Beach, and Nusa Dua Beach. The island is a popular destination for surfers, divers, and snorkelers.</p>
</section>
</main>
<footer>
  <ul>
    <li><a href="#" target="_blank"><i class="fa fa-facebook" aria-hidden="true"></i></a></li>
    <li><a href="#" target="_blank"><i class="fa fa-twitter" aria-hidden="true"></i></a></li>
    <li><a href="#" target="_blank"><i class="fa fa-instagram" aria-hidden="true"></i></a></li>
  </ul>
</footer>
</body>
</html>

```



HTML, CSS

2.1 Create an HTML page for a personal portfolio. Include a header with a navigation menu, a main section with your name and a brief introduction, and a footer with contact information. Use CSS to style the page with a consistent color scheme, font styles, and layout.

```
<!-- index.html -->

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Personal Portfolio</title>
  <link rel="stylesheet" href="styles.css">
</head>
<body>
  <header>
    <nav>
      <ul>
        <li><a href="#about">About</a></li>
        <li><a href="#projects">Projects</a></li>
        <li><a href="#contact">Contact</a></li>
      </ul>
    </nav>
  </header>
  <main>
    <section id="about">
      <h1>Anusree Vinod</h1>
      <p>Welcome to my personal portfolio! I'm a passionate developer and a data analyst with a love for creating innovative solutions. With a strong background in computer science and a keen eye for detail, I'm always looking for new challenges and opportunities to grow.</p>
    </section>
  </main>
  <footer>
    <p>Get in touch:</p>
    <ul>
      <li><a href="https://www.linkedin.com/in/anusreevinod/">LinkedIn</a></li>
      <li><a href="https://github.com/Anusree-vinod">GitHub</a></li>
    </ul>
  </footer>
</body>
</html>

/* styles.css */

/* Global styles */
body {
  font-family: Arial, sans-serif;
  margin: 0;
```

```
padding: 0;
background-color: #f9f9f9;
}

header {
background-color: #333;
color: #fff;
padding: 1em;
text-align: center;
}

nav ul {
list-style: none;
margin: 0;
padding: 0;
display: flex;
justify-content: space-between;
}

nav li {
margin-right: 20px;
}

nav a {
color: #fff;
text-decoration: none;
}

nav a:hover {
color: #ccc;
}

main {
display: flex;
flex-direction: column;
align-items: center;
padding: 2em;
}

h1 {
font-size: 36px;
margin-bottom: 10px;
}

p {
font-size: 18px;
margin-bottom: 20px;
}

footer {
background-color: #333;
```

```

    color: #fff;
    padding: 1em;
    text-align: center;
    clear: both;
}

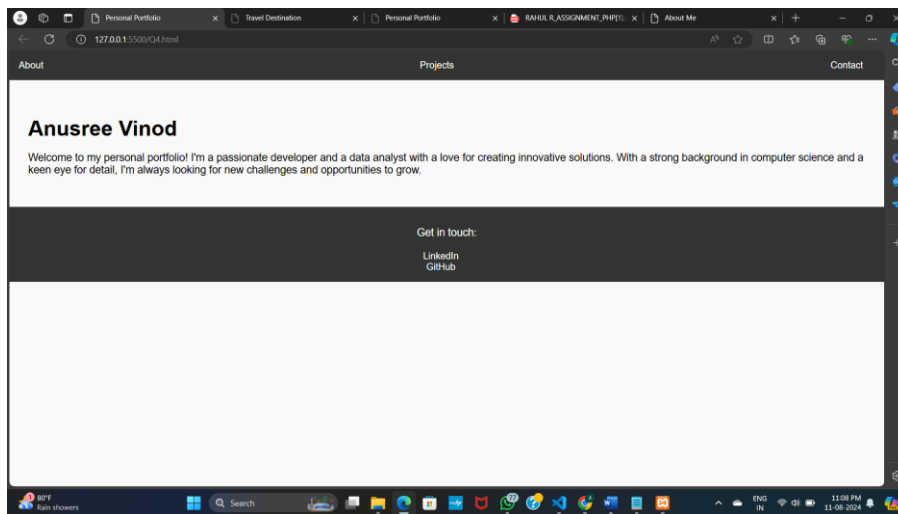
footer ul {
    list-style: none;
    margin: 0;
    padding: 0;
}

footer li {
    margin-right: 20px;
}

footer a {
    color: #fff;
    text-decoration: none;
}

footer a:hover {
    color: #ccc;
}

```



2.3 Design an HTML page for a travel destination. Include a header with a navigation menu, a main section with a hero image, destination information, and a booking form, and a footer with social media links. Use CSS to style the page with a visually appealing layout, appropriate spacing between elements, and a responsive design that maintains the layout structure across different screen sizes.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Travel Destination</title>
  <link rel="stylesheet" href="styles2.css">
</head>
<body>
  <header>
    <nav>
      <ul>
        <li><a href="#">Home</a></li>
        <li><a href="#">About</a></li>
        <li><a href="#">Contact</a></li>
      </ul>
    </nav>
  </header>
  <main>
    <section class="hero">
      
    </section>
    <section class="destination-info">
      <h2>Destination Information</h2>
      <p>Bali is a province of Indonesia and is known for its beautiful beaches, temples, and vibrant culture. The island is home to many ancient temples, including the famous Tanah Lot temple, which is perched on a rock in the sea.</p>
    </section>
    <section class="booking-form">
      <h2>Book Your Trip</h2>
      <form>
        <label for="name">Name:</label>
        <input type="text" id="name" name="name"><br><br>
        <label for="email">Email:</label>
        <input type="email" id="email" name="email"><br><br>
        <label for="phone">Phone:</label>
        <input type="tel" id="phone" name="phone"><br><br>
        <label for="arrival-date">Arrival Date:</label>
        <input type="date" id="arrival-date" name="arrival-date"><br><br>
        <label for="departure-date">Departure Date:</label>
        <input type="date" id="departure-date" name="departure-date"><br><br>
        <input type="submit" value="Book Now">
      </form>
    </section>
  </main>
```

```

<footer>
  <ul>
    <li><a href="#" target="_blank"><i class="fa fa-facebook" aria-hidden="true"></i></a></li>
    <li><a href="#" target="_blank"><i class="fa fa-twitter" aria-hidden="true"></i></a></li>
    <li><a href="#" target="_blank"><i class="fa fa-instagram" aria-hidden="true"></i></a></li>
  </ul>
</footer>
</body>
</html>

```

```

/* Responsive design */

```

```

@media only screen and (max-width: 768px) {
  header nav ul {
    flex-direction: column;
    align-items: center;
  }

  header nav ul li {
    margin-right: 0;
    margin-bottom: 10px;
  }

  .hero {
    height: 50vh;
  }

  .booking-form {
    padding: 1em;
  }

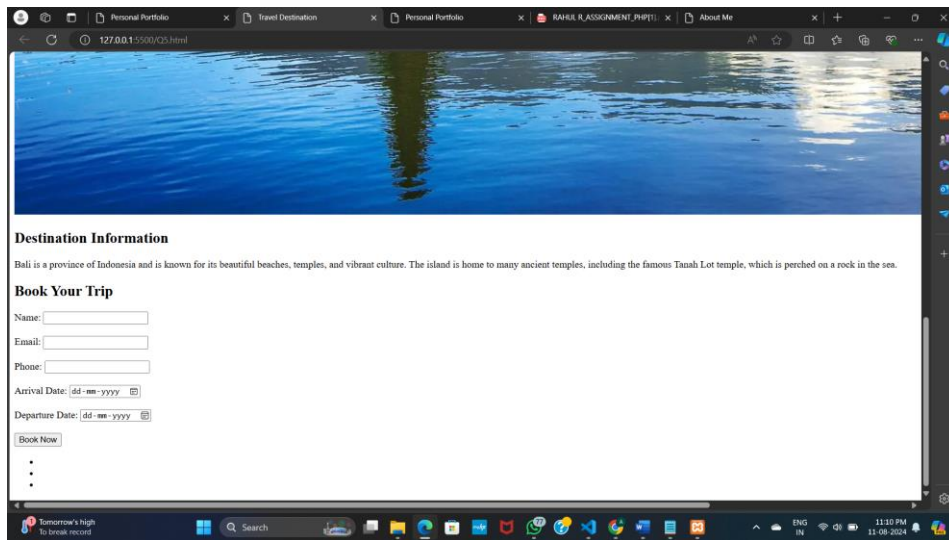
  form {
    width: 100%;
    padding: 0 1em;
  }

  input[type="text"], input[type="email"], input[type="tel"], input[type="date"] {
    width: 100%;
  }

  footer ul {
    flex-direction: column;
    align-items: center;
  }

  footer ul li {
    margin-right: 0;
    margin-bottom: 10px;
  }
}

```

HTML, CSS, JAVASCRIPT

3.1 Create an HTML page for a personal portfolio. Include a header with a navigation menu, a main section with your name and a brief introduction, and a footer with contact information. Use CSS to style the page with a consistent color scheme, font styles, and layout. Implement JavaScript to create a smooth scrolling effect when clicking on the navigation menu links.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Personal Portfolio</title>
  <link rel="stylesheet" href="styles3.css">
</head>
<body>
  <header>
    <nav>
      <ul>
        <li><a href="#about">About</a></li>
        <li><a href="#projects">Projects</a></li>
        <li><a href="#contact">Contact</a></li>
      </ul>
    </nav>
  </header>
  <main>
    <section id="about">
      <h1>ANUSREE VINOD</h1>
      <p>Welcome to my personal portfolio! I'm a web developer with a passion for building innovative and user-friendly applications.</p>
    </section>
    <section id="projects">
      <h2>Projects</h2>
      <ul>
        <li>Project 1</li>
        <li>Project 2</li>
        <li>Project 3</li>
      </ul>
    </section>
  </main>
  <footer>
    <h2>Contact</h2>
    <p>Email: <a href="mailto:anusree@example.com">anusree@example.com</a></p>
    <p>Phone: 555-555-5555</p>
  </footer>
  <script src="script.js"></script>
</body>
</html>
```

```
body {
  font-family: Arial, sans-serif;
```

```
margin: 0;
padding: 0;
background-color: #f2f2f2;
}

header {
  background-color: #333;
  color: #fff;
  padding: 1em;
  text-align: center;
}

nav ul {
  list-style: none;
  margin: 0;
  padding: 0;
  display: flex;
  justify-content: space-between;
}

nav li {
  margin-right: 20px;
}

nav a {
  color: #fff;
  text-decoration: none;
}

main {
  display: flex;
  flex-direction: column;
  align-items: center;
  padding: 2em;
}

section {
  background-color: #fff;
  padding: 1em;
  margin-bottom: 20px;
  box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
}

h1, h2 {
  color: #333;
  margin-bottom: 10px;
}

footer {
  background-color: #333;
  color: #fff;
```

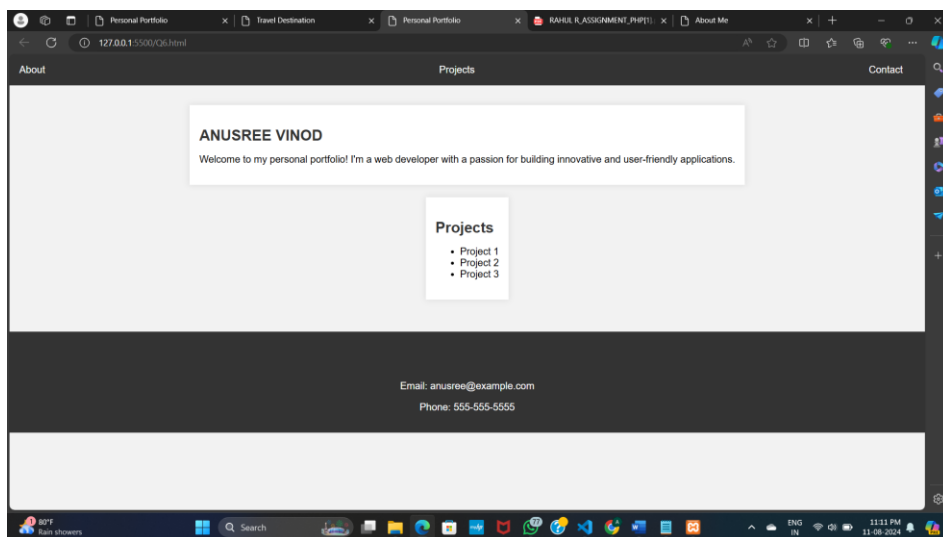
```

padding: 1em;
text-align: center;
clear: both;
}

footer a {
color: #fff;
text-decoration: none;
}

// Smooth scrolling effect
document.querySelectorAll('a[href^="#"]').forEach(anchor => {
  anchor.addEventListener('click', function (e) {
    e.preventDefault();
    document.querySelector(this.getAttribute('href')).scrollIntoView({
      behavior: 'smooth'
    });
  });
});
});

```



3.2 Write a function to reverse a string.

```

function reverseString(str) {
  return str.split('').reverse().join('');
}
let originalString = "Hello, world!";
let reversedString = reverseString(originalString);
console.log(reversedString);

```

```

PS C:\xampp1\htdocs\php_recrd> node rev.js
!dlrow ,olleH

```

3.3 Write a function to check if a number is prime.

```
function isPrime(num) {  
  if (num <= 1) return false;  
  if (num === 2) return true;  
  if (num % 2 === 0) return false;  
  for (let i = 3; i <= Math.sqrt(num); i += 2) {  
    if (num % i === 0) return false;  
  }  
  
  return true;  
}
```

```
let number = 29;  
let result = isPrime(number);  
console.log(result);
```

```
PS C:\xampp1\htdocs\php_recrd> node prime.js  
true
```

3.4 Write a function to find the longest palindrome in a string.

```
function findLongestPalindrome(s) {  
  let longestPalindrome = "";  
  
  for (let i = 0; i < s.length; i++) {  
    let oddPalindrome = expandAroundCenter(s, i, i);  
    if (oddPalindrome.length > longestPalindrome.length) {  
      longestPalindrome = oddPalindrome;  
    }  
  
    let evenPalindrome = expandAroundCenter(s, i, i + 1);  
    if (evenPalindrome.length > longestPalindrome.length) {  
      longestPalindrome = evenPalindrome;  
    }  
  }  
  
  return longestPalindrome;  
}  
  
function expandAroundCenter(s, left, right) {  
  while (left >= 0 && right < s.length && s[left] === s[right]) {  
    left--;  
    right++;  
  }  
  return s.slice(left + 1, right);  
}
```

```
let str = "babad";  
let longestPal = findLongestPalindrome(str);  
console.log(longestPal);
```

```
PS C:\xampp1\htdocs\php_recrd> node pldrm.js
bab
```

3.5 Write a function to find the first non-repeating character in a string.

```
function firstNonRepeatingCharacter(s) {
  const charCount = {};

  for (let i = 0; i < s.length; i++) {
    const char = s[i];
    charCount[char] = (charCount[char] || 0) + 1;
  }

  for (let i = 0; i < s.length; i++) {
    if (charCount[s[i]] === 1) {
      return s[i];
    }
  }

  return null;
}

let str = "swiss";
let result = firstNonRepeatingCharacter(str);

console.log(result);
```

```
PS C:\xampp1\htdocs\php_recrd> node rep.js
w
```

3.6 Write a function to find the missing number in a given array of integers.

```
function findMissingNumber(arr) {
  let n = arr.length + 1;
  let expectedSum = (n * (n + 1)) / 2;
  let actualSum = arr.reduce((sum, num) => sum + num, 0);

  return expectedSum - actualSum;
}

let numbers = [1, 2, 4, 5, 6];
let missingNumber = findMissingNumber(numbers);

console.log(missingNumber);
```

```
PS C:\xampp1\htdocs\php_recrd> node misint.js
3
```

3.7 Write a function to find the intersection of two arrays.

```
function findIntersection(arr1, arr2) {
```

```

let set1 = new Set(arr1);
let set2 = new Set(arr2);
let intersection = [];

for (let num of set2) {
  if (set1.has(num)) {
    intersection.push(num);
  }
}

return intersection;
}

let array1 = [1, 2, 3, 4, 5];
let array2 = [4, 5, 6, 7, 8];
let result = findIntersection(array1, array2);
console.log(result);

```

```

PS C:\xampp1\htdocs\php_recrd> node arr.js
[ 4, 5 ]

```

3.8 Write a function to find the sum of all numbers in a nested array.

```

function sumNestedArray(arr) {
  let sum = 0;

  arr.forEach(element => {
    if (Array.isArray(element)) {
      sum += sumNestedArray(element);
    } else if (typeof element === 'number') {
      sum += element;
    }
  });

  return sum;
}

let nestedArray = [1, [2, 3], [4, [5, 6]], 7];
let result = sumNestedArray(nestedArray);
console.log(result);

```

```

PS C:\xampp1\htdocs\php_recrd> node arr2.js
28

```