1.Create a profile webpage to implement Elements, Attributes, Head, Body, Hyperlink, Formatting, fonts, Anchors, Tables & 2. Create a webpage for college website using Formatting and Fonts, Anchors, Backgrounds, images, Hyperlinks, Lists, Tables

```
<!DOCTYPE html>
<html>
<head>
  <title>My Profile</title>
  <style>
     body {
       background-color: #f0f0f0;
       font-family: Arial, sans-serif;
       margin: 0;
       padding: 0;
     }
     header {
       background-color: #333;
       color: #fff;
       padding: 20px;
       text-align: center;
     }
     h1 {
       font-size: 36px;
     }
     nav {
       text-align: center;
       padding: 10px;
     }
     nav a {
       text-decoration: none;
       margin: 10px;
       color: #333;
     }
     section {
       padding: 20px;
     }
     table {
```

```
width: 100%;
       border-collapse: collapse;
       margin-top: 20px;
    }
    th, td {
       padding: 10px;
       border: 1px solid #333;
    }
    img {
       max-width: 100%;
       height: auto;
    ul {
       list-style-type: disc;
       padding-left: 20px;
    }
  </style>
</head>
<body>
  <header>
    <h1>John Doe</h1>
  </header>
  <nav>
    <a href="#about">About Me</a>
    <a href="#portfolio">Portfolio</a>
    <a href="#contact">Contact</a>
  </nav>
  <section id="about">
    <h2>About Me</h2>
    >
       I am a web developer with a passion for creating beautiful and functional websites.
       My skills include HTML, CSS, JavaScript, and more.
    </section>
  <section id="portfolio">
    <h2>Portfolio</h2>
    <img src="portfolio-image1.jpg" alt="Project 1">
    <img src="portfolio-image2.jpg" alt="Project 2">
```

```
<img src="portfolio-image3.jpg" alt="Project 3">
 </section>
 <section id="contact">
   <h2>Contact</h2>
   >
    You can reach me at <a href="mailto:john@example.com">john@example.com</a>.
   </section>
 <section>
   <h2>Skills</h2>
   ul>
    HTML
    CSS
    JavaScript
    Web Design
   </section>
 <section>
   <h2>Education</h2>
   Degree
      Institution
      Year
    Bachelor's in Computer Science
      University XYZ
      2020
    Master's in Web Development
      Tech Institute
      2022
    </section>
</body>
</html>
```

# 3.Create a webpage to implement class timetable using Images, Tables tags and for formatting use external CSS. & 4.Create a webpage to implement class timetable Images, Tables, List, Frames, Forms, Multimedia

```
<!DOCTYPE html>
<html>
<head>
 <title>Class Timetable</title>
 k rel="stylesheet" type="text/css" href="styles.css">
</head>
<body>
 <h1>Class Timetable</h1>
 Time
    Monday
    Tuesday
    Wednesday
    Thursday
    Friday
  9:00 AM - 10:30 AM
    Math
    Science
    History
    English
    Physical Education
  10:45 AM - 12:15 PM
    English
    Math
    Science
    Physical Education
    Art
  12:30 PM - 1:30 PM
    Lunch
    Lunch
   Lunch
    Lunch
```

```
Lunch
    <h2>Classroom</h2>
  Our classes are held in a modern and well-equipped classroom.
  <img src="classroom.jpg" alt="Classroom Image">
  <h2>Homework Assignment</h2>
    Math: Complete exercises 1-5, page 23
    Science: Read Chapter 4 and answer the questions at the end
    English: Write a short essay on your favorite book
  <h2>Classroom Location</h2>
src="https://www.google.com/maps/embed?pb=!1m18!1m12!1m3!1d2244.673388594587!2
3.1!3m3!1m2!1s0x4876049d787b03df%3A0xf0bd5ce7e732b0d1!2sWestminster%20Abbey
!5e0!3m2!1sen!2suk!4v1575451610531!5m2!1sen!2suk" width="600" height="450"
frameborder="0" style="border:0;" allowfullscreen=""></iframe>
  <h2>Contact Us</h2>
  <form action="contact.php" method="post">
    <label for="name">Name:</label>
    <input type="text" id="name" name="name"><br>
    <label for="email">Email:</label>
    <input type="email" id="email" name="email"><br>
    <label for="message">Message:</label><br>
    <textarea id="message" name="message" rows="4" cols="50"></textarea><br>
    <input type="submit" value="Submit">
  </form>
  <h2>Multimedia Presentation</h2>
  <audio controls>
    <source src="class audio.mp3" type="audio/mpeg">
    Your browser does not support the audio element.
  </audio>
  <video controls>
    <source src="class_video.mp4" type="video/mp4">
```

```
Your browser does not support the video element.
  </video>
</body>
</html>
Css:
body {
  font-family: Arial, sans-serif;
  background-color: #f0f0f0;
  margin: 0;
  padding: 0;
}
h1, h2 {
  color: #333;
}
table.timetable {
  border-collapse: collapse;
  width: 80%;
  margin: 20px auto;
}
table.timetable th, table.timetable td {
  border: 1px solid #333;
  padding: 10px;
  text-align: center;
}
img {
  max-width: 100%;
  height: auto;
}
ul {
  padding-left: 20px;
```

<u>5. Create a webpage for Inventory Management system to implement CSS Syntax and different properties (Inclusion, Color, Background, Fonts, Tables, lists, etc.), all 3 types of CSS.</u>

```
<!DOCTYPE html>
<html>
<head>
 <title>Inventory Management System</title>
 <!-- External CSS -->
 k rel="stylesheet" type="text/css" href="styles.css">
 <!-- Internal CSS -->
 <style>
   /* Internal CSS */
   h1 {
     color: #333;
     text-align: center;
   }
   /* Inline CSS */
   .highlight {
     background-color: yellow;
   }
 </style>
</head>
<body>
 <h1 style="font-family: Arial, sans-serif;">Inventory Management System</h1>
 Welcome to our inventory management system. Here you can keep
track of your products and stock levels.
 <h2 style="color: #555;">Product List</h2>
 >
     Product ID
     Product Name
     Category
     Stock Level
   001
     Widget A
     Widgets
     50
   >
```

```
002
      Gadget B
      Gadgets
      30
    <h2 style="font-family: 'Times New Roman', serif;">Category List</h2>
  <l
    Widgets
    Gadgets
  </body>
</html>
Css: /* External CSS */
.inventory {
  width: 80%;
  margin: 20px auto;
  border-collapse: collapse;
}
.inventory th, .inventory td {
  border: 1px solid #333;
  padding: 10px;
  text-align: center;
}
ul {
  list-style-type: circle;
}
```

### **Inventory Management System**

Welcome to our inventory management system. Here you can keep track of your products and stock levels.

#### **Product List**

Product ID	Product Name	Category	Stock Level
001	Widget A	Widgets	50
002	Gadget B	Gadgets	30

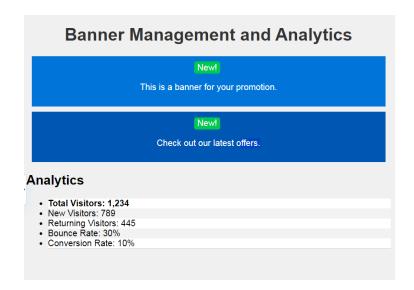
#### Category List

- WidgetsGadgets

# <u>6.Create a webpage for Banner Management and Analytics to implement CSS3</u> selectors, Pseudo classes, Pseudo elements.

```
<!DOCTYPE html>
<html>
<head>
  <title>Banner Management and Analytics</title>
  <style>
    /* Basic CSS styling for demonstration */
    body {
       font-family: Arial, sans-serif;
       background-color: #f0f0f0;
    }
    h1 {
       text-align: center;
       color: #333;
    }
    /* Using CSS3 selectors and pseudo-classes */
    .banner {
       background-color: #0074D9;
       color: #fff;
       text-align: center;
       padding: 10px;
       margin: 10px;
    }
    .banner:hover {
       background-color: #0056b3;
    }
    /* Using CSS3 pseudo-elements */
    .banner::before {
       content: 'New!';
       display: inline-block;
       background-color: #00C851;
       color: #fff;
       padding: 2px 6px;
       border-radius: 4px;
       margin-right: 5px;
```

```
}
    /* CSS3 child selectors */
    .analytics-list li:nth-child(even) {
      background-color: #f2f2f2;
    }
    .analytics-list li:nth-child(odd) {
      background-color: #ffffff;
    }
    /* CSS3 first-child and last-child pseudo-classes */
    .analytics-list li:first-child {
      font-weight: bold;
    }
    .analytics-list li:last-child {
      border-bottom: 1px solid #ccc;
  </style>
</head>
<body>
  <h1>Banner Management and Analytics</h1>
  <div class="banner">
    This is a banner for your promotion.
  </div>
  <div class="banner">
    Check out our latest offers.
  </div>
  <h2>Analytics</h2>
  Total Visitors: 1,234
    New Visitors: 789
    Returning Visitors: 445
    Sounce Rate: 30%
    Conversion Rate: 10%
  </body>
</html>
```



# 7.Create a webpage to implement CSS3 selectors, Pseudo classes, Pseudo elements for Advertisement.

```
<!DOCTYPE html>
<html>
<head>
  <title>Advertisement</title>
    /* Basic CSS styling for demonstration */
    body {
       font-family: Arial, sans-serif;
       background-color: #f0f0f0;
    }
    h1 {
       text-align: center;
       color: #333;
    }
    /* Using CSS3 selectors and pseudo-classes */
    .ad-container {
       display: flex;
       flex-wrap: wrap;
      justify-content: space-between;
       padding: 20px;
    }
    .ad {
       width: 30%;
```

```
background-color: #0074D9;
       color: #fff;
       text-align: center;
       padding: 10px;
       margin: 10px;
    }
    .ad:hover {
       background-color: #0056b3;
    }
    /* Using CSS3 pseudo-elements */
    .ad::before {
       content: 'Sponsored';
       display: block;
       background-color: #00C851;
       color: #fff;
       padding: 5px;
       font-size: 14px;
    }
    .ad::after {
       content: 'Learn More';
       display: block;
       background-color: #f0f0f0;
       color: #333;
       padding: 5px;
       font-size: 14px;
  </style>
</head>
<body>
  <h1>Advertisement</h1>
  <div class="ad-container">
    <div class="ad">
       Ad 1: Save Big on Electronics
    </div>
    <div class="ad">
       Ad 2: Limited Time Offer
    </div>
    <div class="ad">
```

```
Ad 3: Exclusive Deals
</div>
</body>
</html>
```



# 8.Create responsive webpage for Online News Paper Site to implement Grid system, Forms, Button, Navbar, Breadcrumb, Jumbotron using bootstrap.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Online Newspaper</title>
  <!-- Bootstrap CSS -->
  k rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
</head>
<body>
  <!-- Bootstrap Navbar -->
  <nav class="navbar navbar-expand-lg navbar-light bg-light">
    <a class="navbar-brand" href="#">Online Newspaper</a>
    <button class="navbar-toggler" type="button" data-toggle="collapse"</pre>
data-target="#navbarNav" aria-controls="navbarNav" aria-expanded="false"
aria-label="Toggle navigation">
       <span class="navbar-toggler-icon"></span>
    </button>
```

```
<div class="collapse navbar-collapse" id="navbarNav">
    <a class="nav-link" href="#">Home</a>
     class="nav-item">
        <a class="nav-link" href="#">News</a>
      cli class="nav-item">
       <a class="nav-link" href="#">Opinion</a>
      class="nav-item">
       <a class="nav-link" href="#">Sports</a>
      class="nav-item">
        <a class="nav-link" href="#">Entertainment</a>
     </div>
</nav>
<!-- Bootstrap Breadcrumb -->
<nav aria-label="breadcrumb">

    class="breadcrumb">

    cli class="breadcrumb-item"><a href="#">Home</a>
    class="breadcrumb-item"><a href="#">News</a>
    Article Title
 </nav>
<!-- Bootstrap Grid System (Container and Rows) -->
<div class="container">
 <div class="row">
    <!-- Main Content Area (8 columns wide on medium screens and wider) -->
    <div class="col-md-8">
      <!-- Bootstrap Jumbotron -->
     <div class="jumbotron">
        <h1 class="display-4">Article Title</h1>
        Lorem ipsum dolor sit amet, consectetur adipiscing elit.
       <hr class="my-4">
        More content here...
     </div>
    </div>
    <!-- Sidebar (4 columns wide on medium screens and wider) -->
```

```
<div class="col-md-4">
          <!-- Bootstrap Form -->
          <form>
            <div class="form-group">
              <label for="search">Search</label>
              <input type="text" class="form-control" id="search"</pre>
placeholder="Search...">
            </div>
            <button type="submit" class="btn btn-primary">Submit</button>
          </form>
       </div>
    </div>
  </div>
  <!-- Bootstrap JavaScript (¡Query and Popper.js) -->
  <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"></script>
  <script
src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.6/dist/umd/popper.min.js"></script>
  <!-- Bootstrap JavaScript (including Bootstrap JS) -->
  <script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
</body>
</html>
```

# 9.Perform from the following to develop interactive web pages using JavaScript:

# a. Variables, Operators, Conditions, Loops,

## b. Functions, Events, Classes and Objects,

```
<button onclick="appendToDisplay('4')">4</button>
  <button onclick="appendToDisplay('5')">5</button>
  <button onclick="appendToDisplay('6')">6</button>
  <button onclick="appendToDisplay('-')">-</button>
  <br>
  <button onclick="appendToDisplay('7')">7</button>
  <button onclick="appendToDisplay('8')">8</button>
  <button onclick="appendToDisplay('9')">9</button>
  <button onclick="appendToDisplay('*')">*</button>
  <button onclick="clearDisplay()">C</button>
  <button onclick="appendToDisplay('0')">0</button>
  <button onclick="calculateResult()">=</button>
  <button onclick="appendToDisplay('/')">/</button>
  <script>
    let displayValue = ";
    function appendToDisplay(value) {
       display Value += value;
       document.getElementById('display').value = displayValue;
    }
    function clearDisplay() {
       displayValue = ";
       document.getElementById('display').value = ";
    }
    function calculateResult() {
       try {
         displayValue = eval(displayValue);
         document.getElementById('display').value = displayValue;
       } catch (error) {
         displayValue = ";
         document.getElementById('display').value = 'Error';
  </script>
</body>
</html>
```

# 10.Perform from the following to develop interactive web pages using JavaScript: Error handling, Validations, Arrays, String, Date

```
<!DOCTYPE html>
<html>
<head>
  <title>Interactive Web Page</title>
</head>
<body>
  <h1>Interactive Web Page</h1>
  <h2>User Registration</h2>
  <form id="registrationForm" onsubmit="return validateForm()">
    <label for="username">Username:</label>
    <input type="text" id="username" required>
    <span id="usernameError" class="error"></span>
    <label for="password">Password:</label>
    <input type="password" id="password" required>
    <span id="passwordError" class="error"></span>
    <button type="submit">Register</button>
  </form>
  <h2>Operations on Arrays and Strings</h2>
  Concatenated String: <span id="concatenatedString"></span>
  Reversed Array: <span id="reversedArray"></span>
  <h2>Current Date</h2>
  <script>
    // Error handling and validation
    function validateForm() {
      const username = document.getElementById('username').value;
      const password = document.getElementById('password').value;
      const usernameError = document.getElementById('usernameError');
      const passwordError = document.getElementById('passwordError');
      usernameError.textContent = ";
      passwordError.textContent = ";
```

```
if (username.length < 5) {
          usernameError.textContent = 'Username must be at least 5 characters.';
          return false:
       }
       if (password.length < 8) {
          passwordError.textContent = 'Password must be at least 8 characters.';
         return false;
       }
       return true;
     }
     // Operations on Arrays and Strings
     const string1 = 'Hello, ';
     const string2 = 'world!';
     const concatenatedString = string1.concat(string2);
     const reversedArray = ['apple', 'banana', 'cherry'].reverse();
     document.getElementById('concatenatedString').textContent = concatenatedString;
     document.getElementById('reversedArray').textContent = reversedArray.join(', ');
    // Current Date
     const currentDate = new Date().toLocaleString();
     document.getElementById('currentDate').textContent = currentDate;
  </script>
</body>
</html>
```

# 11.Create a responsive webpage to design login form and Validation of Username and Password using JavaScript

```
<!DOCTYPE html>
<html>
<head>
    <title>Login Form</title>
    <tyle>
        body {
            font-family: Arial, sans-serif;
            background-color: #f0f0f0;
            display: flex;
            justify-content: center;
            align-items: center;
```

```
height: 100vh;
    }
    .container {
       background-color: #fff;
       padding: 20px;
       border: 1px solid #ccc;
       border-radius: 5px;
       box-shadow: 3px 3px 5px #888888;
    }
    label, input {
       display: block;
       margin-bottom: 10px;
    }
    input[type="text"], input[type="password"] {
       width: 100%;
       padding: 10px;
       border: 1px solid #ccc;
       border-radius: 5px;
    }
    button {
       background-color: #0074D9;
       color: #fff;
       padding: 10px;
       border: none;
       border-radius: 5px;
       cursor: pointer;
    }
    .error {
       color: red;
       font-size: 12px;
  </style>
</head>
<body>
  <div class="container">
    <h1>Login Form</h1>
    <form id="loginForm" onsubmit="return validateForm()">
       <label for="username">Username:</label>
       <input type="text" id="username" required>
```

```
<span id="usernameError" class="error"></span>
       <label for="password">Password:</label>
       <input type="password" id="password" required>
       <span id="passwordError" class="error"></span>
       <button type="submit">Login</button>
    </form>
  </div>
  <script>
    function validateForm() {
       const username = document.getElementById('username').value;
       const password = document.getElementById('password').value;
       const usernameError = document.getElementById('usernameError');
       const passwordError = document.getElementById('passwordError');
       usernameError.textContent = ";
       passwordError.textContent = ";
       if (username.length < 5) {
         usernameError.textContent = 'Username must be at least 5 characters.';
         return false;
       }
       if (password.length < 8) {
         passwordError.textContent = 'Password must be at least 8 characters.';
         return false;
       }
       return true;
  </script>
</body>
</html>
```

### 12.Implement the different array methods in Javascript.

push(): Adds one or more elements to the end of an array and returns the new length of the array.

```
Copy code
```

```
const fruits = ['apple', 'banana'];
fruits.push('cherry');
console.log(fruits); // ['apple', 'banana', 'cherry']
```

pop(): Removes the last element from an array and returns that element.

### javascript

#### Copy code

```
const fruits = ['apple', 'banana', 'cherry'];
const removedFruit = fruits.pop();
console.log(fruits); // ['apple', 'banana']
console.log(removedFruit); // 'cherry'
```

forEach(): Executes a provided function once for each array element.

#### javascript

#### Copy code

```
const colors = ['red', 'green', 'blue'];
colors.forEach(color => console.log(color));
```

map(): Creates a new array by applying a function to each element of an existing array.

#### javascript

### Copy code

```
const numbers = [1, 2, 3];
const squaredNumbers = numbers.map(num => num * num);
console.log(squaredNumbers); // [1, 4, 9]
```

filter(): Creates a new array with all elements that pass a test provided by a function.

#### javascript

#### Copy code

```
const numbers = [1, 2, 3, 4, 5, 6];
const evenNumbers = numbers.filter(num => num % 2 === 0);
console.log(evenNumbers); // [2, 4, 6]
```

reduce(): Applies a function against an accumulator and each element in the array to reduce it to a single value.

```
javascript
Copy code

const numbers = [1, 2, 3, 4, 5];
const sum = numbers.reduce((accumulator, currentValue) => accumulator + currentValue, 0);
console.log(sum); // 15
```

13.Create the front-end application for Clinic/ Health Management using JSX, Components, Props, State, Forms, Events, Routers, Refs, Keys of React.

### 14.Implement the different String methods in Javascript.

```
<u>length</u>: Returns the length of a string.
```

```
javascript
Copy code
const text = "Hello, World!";
const length = text.length;
console.log(length); // 13
```

### charAt(): Returns the character at the specified index in a string.

```
javascript
Copy code
const text = "Hello, World!";
const character = text.charAt(7); // Indexing starts from 0
console.log(character); // 'W'
```

substring(): Extracts a portion of a string and returns it as a new string.

iavascript

```
Copy code
const text = "Hello, World!";
const substring = text.substring(0, 5); // Extracts characters from index 0 to
 onsole.log(substring); // 'Hello'
      indexOf(): Returns the index of the first occurrence of a specified substring
      in a string. Returns -1 if the substring is not found.
javascript
Copy code
const text = "Hello, World!";
const index = text.indexOf("World"):
console.log(index); // 7
      toUpperCase(): Converts a string to uppercase.
<u>javascript</u>
Copy code
<u>const_text = "Hello, World!";</u>
const_uppercaseText = text.t
console.log(uppercaseText); // 'HELLO, WORLD!'
      replace(): Searches for a specified substring or pattern in a string and
      replaces it with another string.
javascript
Copy code
<u>const_text = "Hello, World!";</u>
console.log(replacedText): // 'Hello. Universe!'
```

**15.Create the back-end application using Node.js or Express (Callbacks, Event loops).** const fs = require("fs");

// Function to read a file asynchronously and log its content or any error function readAndLogFile() {

```
const timeoutScheduled = Date.now();

fs.readFile("sample.txt", "utf8", (err, data) => {
    if (err) {
        console.error(err); // Callback is used to handle errors
    } else {
        console.log(data); // Callback is used to handle successful data retrieval
    }

    const delay = Date now() - timeoutScheduled;
    console.log(`${delay}ms have passed since I was scheduled`);

    // While loop (for demonstration purposes, simulating a blocking operation)
    const startCallback = Date.now();
    while (Date.now() - startCallback < 10) {}
});
}

readAndLogFile();</pre>
```

# 16.Create a responsive webpage Pharmacy Management System using HTML, CSS and Javascript.

```
<!DOCTYPE html>
<html>
<head>
  <title>Pharmacy Management System</title>
  <style>
    body {
       font-family: Arial, sans-serif;
       background-color: #f0f0f0;
    }
    .container {
       max-width: 800px;
       margin: 0 auto;
       padding: 20px;
       background-color: #fff;
       border: 1px solid #ccc;
       border-radius: 5px;
```

```
box-shadow: 3px 3px 5px #888888;
     }
    h1 {
       text-align: center;
     .menu {
       display: flex;
       justify-content: space-around;
       margin: 20px 0;
     .menu a {
       text-decoration: none;
       color: #0074D9;
     }
     .content {
       background-color: #f5f5f5;
       padding: 20px;
       border: 1px solid #ccc;
       border-radius: 5px;
     }
     table {
       width: 100%;
       border-collapse: collapse;
     }
     table, th, td {
       border: 1px solid #ccc;
     th, td {
       padding: 10px;
       text-align: left;
  </style>
</head>
<body>
  <div class="container">
    <h1>Pharmacy Management System</h1>
```

```
<div class="menu">
     <a href="#">Inventory</a>
     <a href="#">Sales</a>
     <a href="#">Orders</a>
   </div>
   <div class="content">
     <h2>Inventory</h2>
     >
        Product Name
        Quantity
        Price
       >
        Medicine A
        100
        $10.00
       <!-- Add more rows for inventory items -->
     </div>
 </div>
</body>
</html>
```

17. Create the front-end application for Travel Advisory WebApp using ReactJS