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LAB Assignment - 1

Question 1

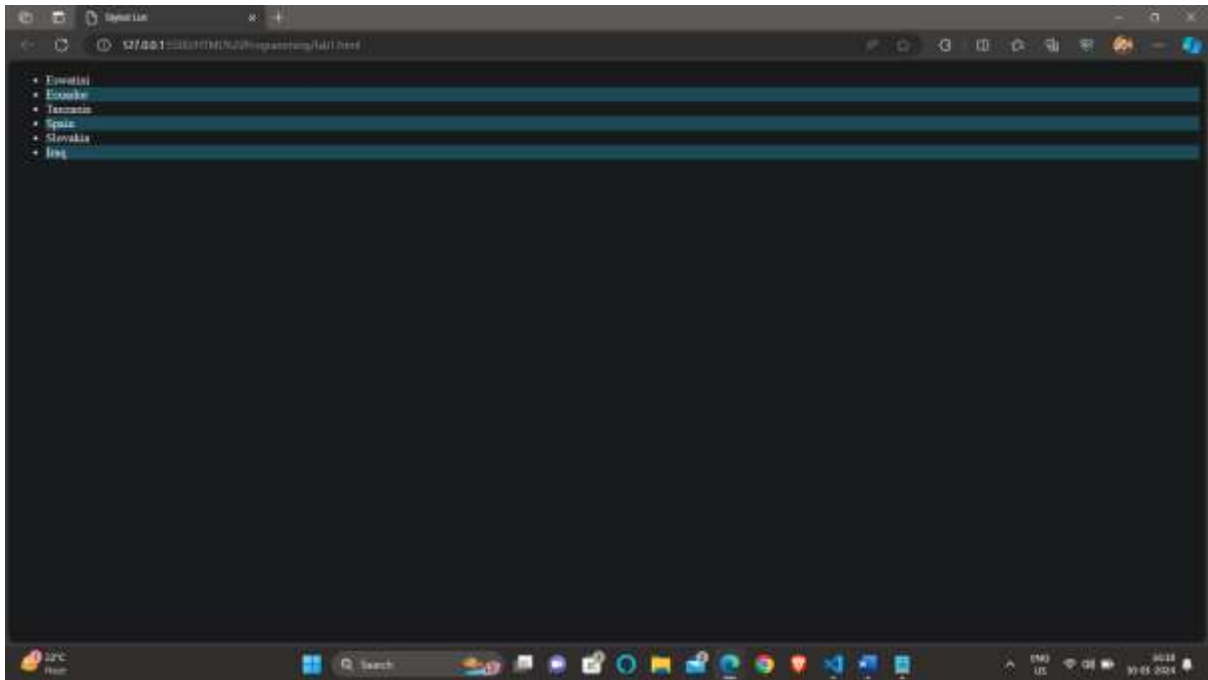
Code :

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <style>
    /* Add a light blue background to every other list item */
    ul li:nth-child(even) {
      background-color: rgb(173, 216, 230); /* Light Blue using the rgb method */
    }
  </style>
  <!-- <link rel="stylesheet" href="styles.css"> -->
  <title>Styled List</title>
</head>
<body>
  <ul>
    <li>Eswatini</li>
    <li>Ecuador</li>
    <li>Tanzania</li>
    <li>Spain</li>
    <li>Slovakia</li>
    <li>Iraq</li>
```


</body>

</html>

Output :



Question 2

Code :

```
<!DOCTYPE html>
```

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

```
<head>
```

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

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
<style>
```

```
table {
```

```
    font-family: 'Arial', sans-serif;
```

```
    border-collapse: collapse;
```

```
    width: 100%;
```

```
}
```

```
th, td {  
    border: 1px solid #dddddd;  
    text-align: left;  
    padding: 8px;  
}
```

```
/* Style odd rows with light gray background */  
tr:nth-child(odd) {  
    background-color: #f2f2f2;  
}
```

```
/* Style header row with white text and black background */  
th {  
    background-color: black;  
    color: white;  
    font-size: 14px;  
}
```

```
</style>
```

```
<title>Styled Table</title>
```

```
</head>
```

```
<body>
```

```
<table>
```

```
<tbody>
```

```
<tr>
```

```
<td>Albania</td>
```

```
<td>Tirana</td>
```

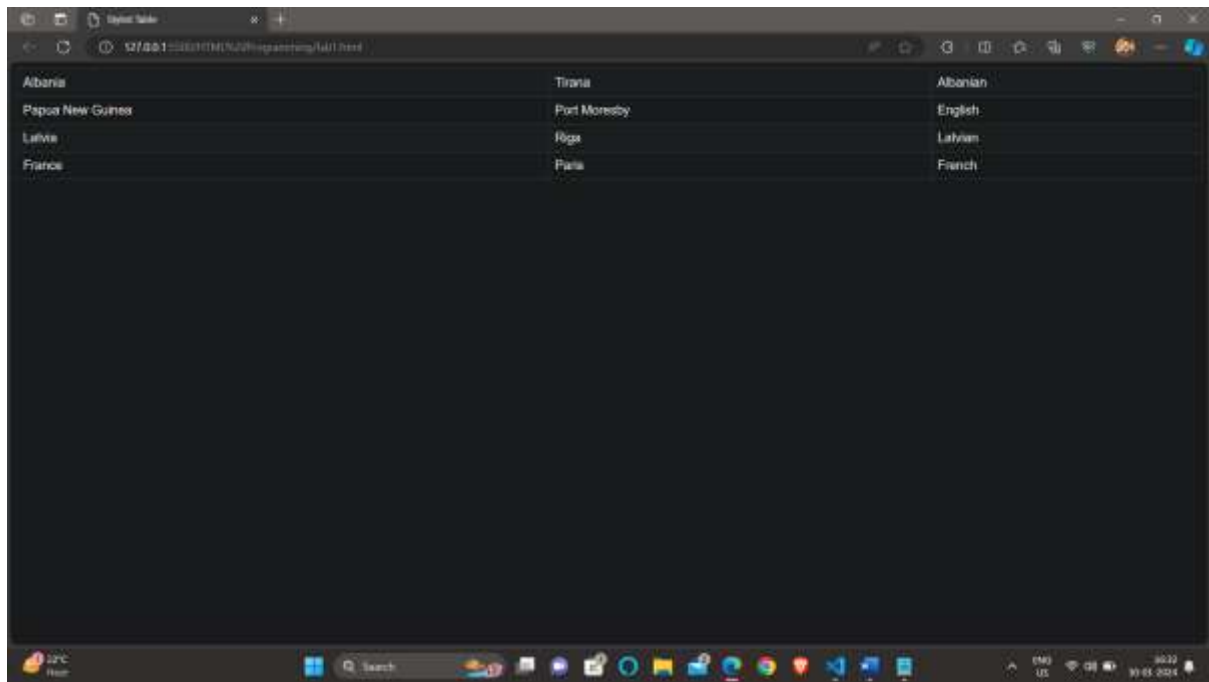
```
<td>Albanian</td>
```

```
</tr>
```

```
<tr>
```

```
<td>Papua New Guinea</td>
<td>Port Moresby</td>
<td>English</td>
</tr>
<tr>
<td>Latvia</td>
<td>Riga</td>
<td>Latvian</td>
</tr>
<tr>
<td>France</td>
<td>Paris</td>
<td>French</td>
</tr>
</tbody>
</table>
</body>
</html>
```

Output :



Question 3

Code :

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Grilled Cheese Sandwiches with Bacon and Tomato</title>
<style>
  body {
    font-family: 'Sans-serif';
  }

  h1 {
    font-size: 24px;
    margin-bottom: 10px;
  }
```

```
ul {  
  list-style: none;  
  padding: 0;  
}
```

```
li {  
  margin-bottom: 8px;  
  padding-left: 20px;  
}
```

```
.meat {  
  background-color: #ffcccc; /* light red */  
}
```

```
.vegetable {  
  background-color: #ccffcc; /* light green */  
}
```

```
.dairy {  
  background-color: #ffffcc; /* light yellow */  
}
```

```
.instructions {  
  font-style: italic;  
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h1>Grilled Cheese Sandwiches with Bacon and Tomato</h1>
```

<h2>Ingredients:</h2>

<li class="meat">Bacon

<li class="dairy">Cheddar cheese slices

<li class="dairy">Butter

<li class="vegetable">Tomato slices

<li class="dairy">Bread slices

<h2 class="instructions">Instructions:</h2>

<p>1. Cook the bacon until crispy.</p>

<p>2. Butter one side of each bread slice.</p>

<p>3. Place a slice of cheese, bacon, and tomato between two bread slices (buttered side out).</p>

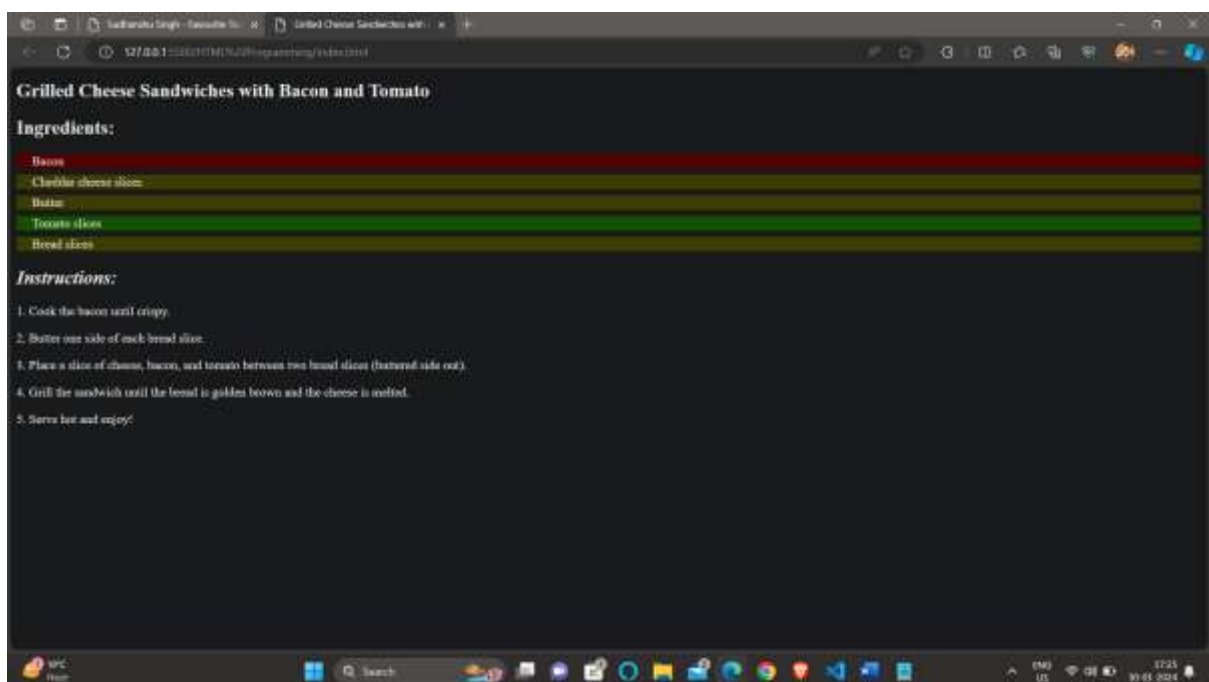
<p>4. Grill the sandwich until the bread is golden brown and the cheese is melted.</p>

<p>5. Serve hot and enjoy!</p>

</body>

</html>

Output :



Question 4

Code :

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Two Column Webpage</title>

  <style>

    body {

      font-family: 'Sans-serif';

      margin: 0;

      padding: 0;

    }

    .container {

      display: flex;

      width: 100%;

    }

    .column {

      flex: 1;

      padding: 20px;

    }

    .left-column {

      background-color: #f2f2f2; /* light gray */

    }
```



```
.right-column {  
    background-color: #ccffcc; /* light green */  
}
```

```
ul {  
    list-style-type: none;  
    padding: 0;  
}
```

```
li {  
    margin-bottom: 10px;  
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div class="container">
```

```
<div class="column left-column">
```

```
<h2>Best Selling Books on Kindle</h2>
```

```
<ul>
```

```
<li>The Bad Weather Friend</li>
```

```
<li>House of Flame and Shadows</li>
```

```
<li>The Exception to the Rule</li>
```

```
<li>Last Night</li>
```

```
<li>Worst Wingman Ever</li>
```

```
</ul>
```

```
</div>
```

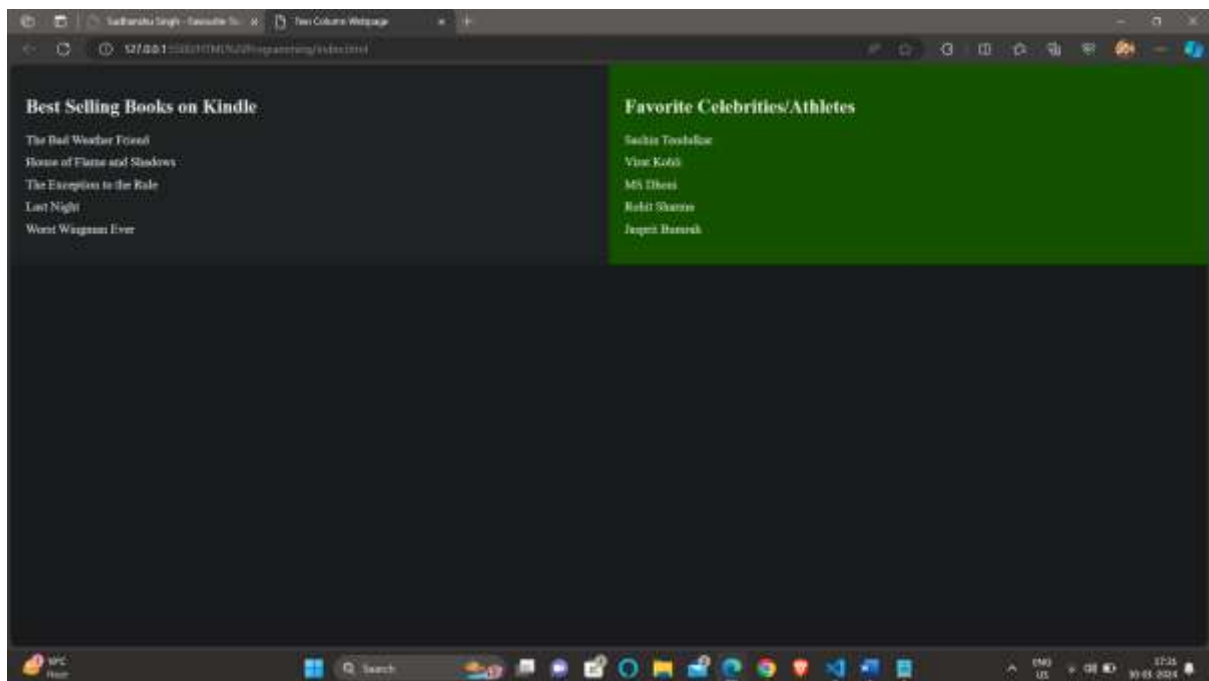
```
<div class="column right-column">
```

```
<h2>Favorite Celebrities/Athletes</h2>
```

```
<ul>
```

```
<li>Sachin Tendulkar</li>
<li>Virat Kohli</li>
<li>MS Dhoni</li>
<li>Rohit Sharma</li>
<li>Jasprit Bumrah</li>
</ul>
</div>
</div>
</body>
</html>
```

Output :



Question 5

Code :

1. index.html

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

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

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
<style>
```

```
body {  
  font-family: 'Sans-serif';  
  margin: 0;  
  padding: 0;  
}
```

```
nav {  
  background-color: #a6d4f1;  
  padding: 10px;  
}
```

```
h1 {  
  display: inline-block;  
  background-color: #3c5f7d;  
  color: white;  
  padding: 10px;  
  margin: 0;  
  transition: background-color 0.3s ease;  
}
```

```
ul {  
  list-style-type: none;  
  margin: 0;  
  padding: 0;  
  display: inline;  
}
```

```
li {
```

```
display: inline;
margin-right: 20px;
}

a {
text-decoration: none;
color: #333;
transition: color 0.3s ease;
}

a:hover {
color: #3c5f7d;
}
</style>
<title>Document</title>
</head>
<body>
<nav>
<h1>Title</h1>
<ul>
<li><a href="./index.html">Home</a></li>
<li><a href="./hobbies.html">Hobbies</a></li>
<li><a href="./teams.html">Teams</a></li>
</ul>
</nav>
</body>
</html>
```

2. hobbies.html

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <link rel="stylesheet" href="styles.css">

  <title>Hobbies</title>

</head>

<body>

  <header>

    <nav>

      <ul>

        <li><a href="index.html">Home</a></li>

        <li><a href="hobbies.html">Hobbies</a></li>

        <li><a href="teams.html">Teams</a></li>

      </ul>

    </nav>

  </header>

  <main>

    <section class="main-content">

      <h1>Welcome to Sudhanshu Singh Hobbies page</h1>

      <p>All work and no play makes your life dull. So you need fun activities too. Hobbies are activities that are fun, entertaining and relaxing. Your hobby can be educative too. There are many kinds of hobbies. People pursue their hobbies with great passion and zest. Developing a hobby for your self will prove to be useful. Hobbies will help you use your leisure time gainfully. Your hobbies may be lifelong. You can pursue more than one hobby too.

      Music, dance, reading, story writing, sports, philately, painting and theatre may all be hobbies. Interestingly, one person's profession may be another person's hobby. For instance, one could be a professional flautist, but for another playing the flute could be a hobby. A hobby is a fun activity that is pursued during one's leisure hours.</p>
```

```
</section>
</main>

<footer>
  <p>&copy; 2024 Sudhanshu Singh. All rights reserved.</p>
</footer>
</body>
</html>
```

3. teams.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="styles.css">
  <title>Sudhanshu Singh - Favourite Teams</title>
</head>
<body>
  <header>
    <nav>
      <ul>
        <li><a href="index.html">Home</a></li>
        <li><a href="hobbies.html">Hobbies</a></li>
        <li><a href="teams.html">Teams</a></li>
      </ul>
    </nav>
  </header>

  <main>
```

```
<section class="main-content">
```

```
<h1>Welcome to Sudhanshu Singh Favourite Teams</h1>
```

```
<p>Cricket is my favourite sport. Cricket is a sport that is widely played across the globe and it is played by everyone irrespective of their caste, creed or colour. It is also called the Gentleman's Game as it was played by British officers back in the 16th century.
```

```
I play cricket every day in the evening with my neighbourhood friends. Although we don't obey the rules of cricket, it is a great source of physical exercise and entertainment. We play in a team of 5 versus 5 whereas in this game of cricket each team has 11 members.</p>
```

```
</section>
```

```
</main>
```

```
<footer>
```

```
<p>&copy; 2024 Sudhanshu Singh. All rights reserved.</p>
```

```
</footer>
```

```
</body>
```

```
</html>
```

4. styles.css

```
/* Reset some default browser styles */
```

```
body, h1, h2, h3, p, ul, li {
```

```
  margin: 0;
```

```
  padding: 0;
```

```
}
```

```
body {
```

```
  font-family: 'Arial', sans-serif;
```

```
}
```

```
header {
```

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

```
color: #fff;
padding: 10px;
position: fixed;
width: 100%;
top: 0;
z-index: 1000;
}
```

```
nav ul {
  list-style-type: none;
}
```

```
nav ul li {
  display: inline;
  margin-right: 20px;
}
```

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

```
main {
  margin-top: 60px; /* Adjust margin to account for fixed navbar */
}
```

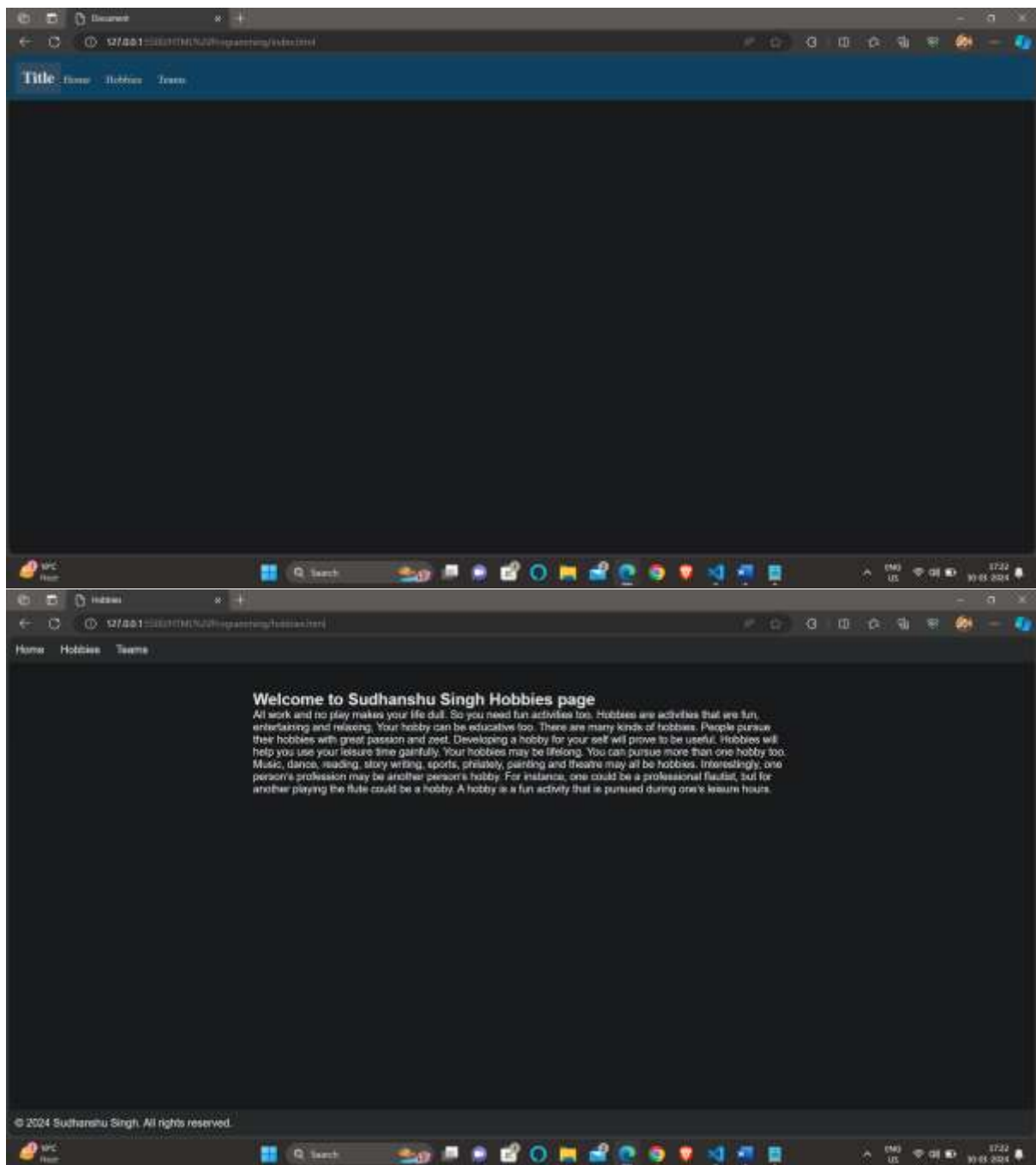
```
.main-content {
  max-width: 800px;
  margin: 0 auto;
  padding: 20px;
```

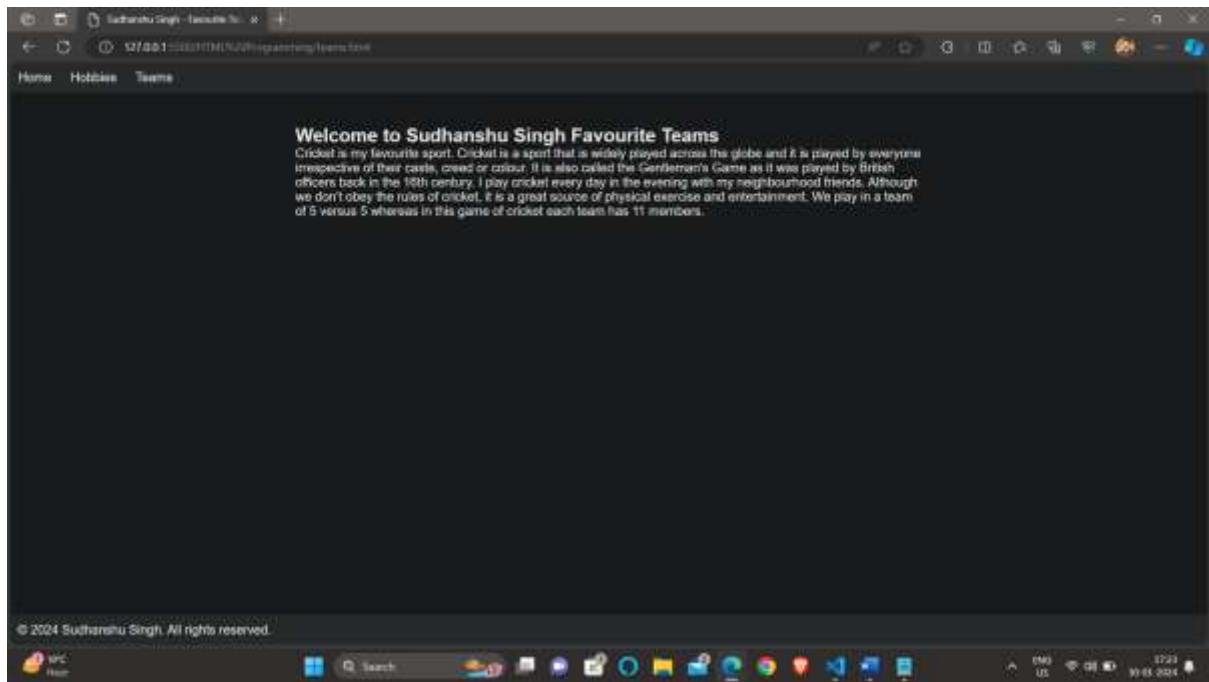


```
}
```

```
footer {  
  background-color: #333;  
  color: #fff;  
  padding: 10px;  
  position: fixed;  
  bottom: 0;  
  width: 100%;  
}
```

Output :





Question 6

Code :

HTML File :

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="styles.css">
  <title>Spinning Playing Card</title>
</head>
<body>
  <div class="playing-card"></div>
</body>
</html>
```

CSS File :

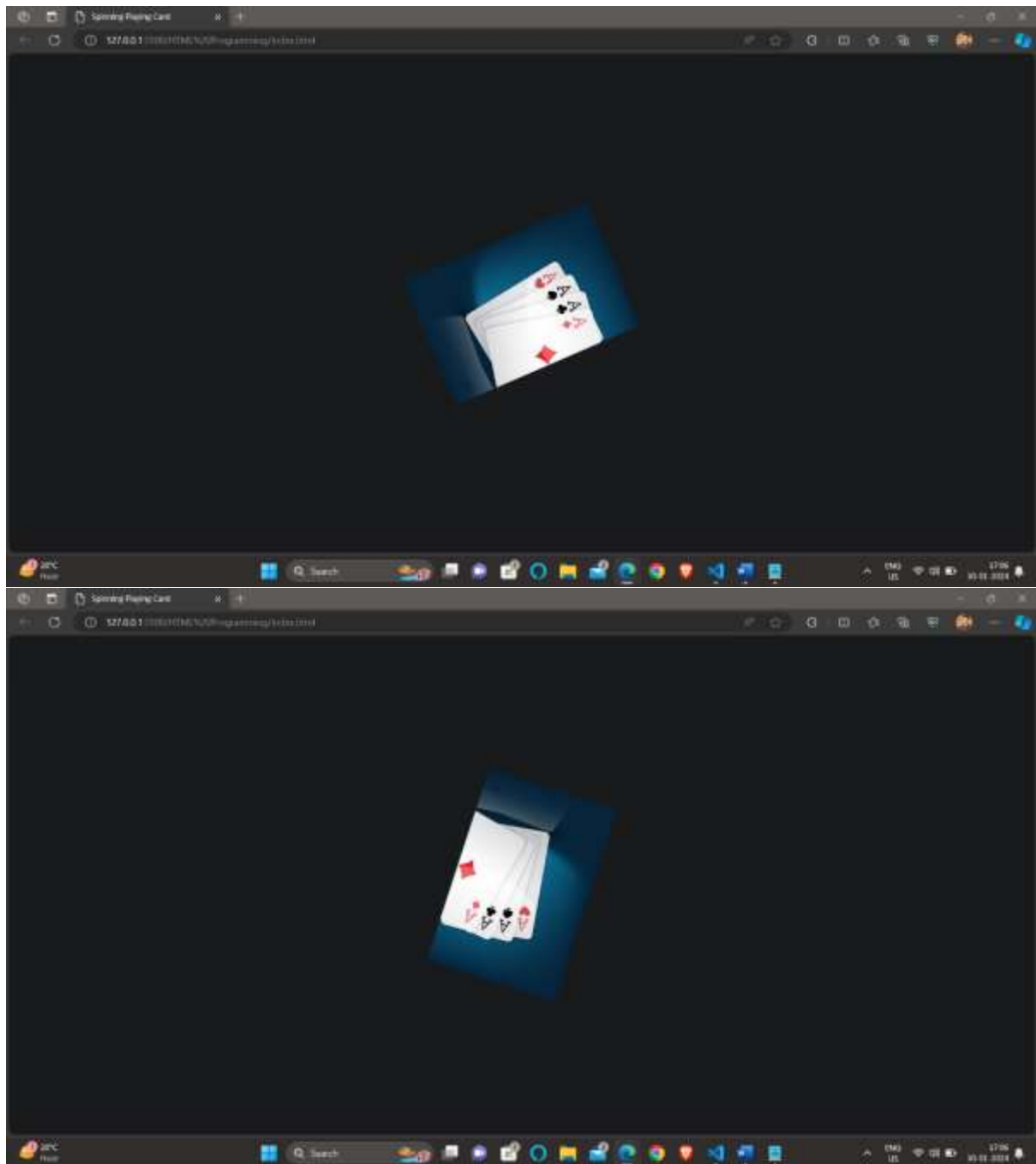
```
body {
```

```
display: flex;
align-items: center;
justify-content: center;
height: 100vh;
margin: 0;
}
```

```
.playing-card {
width: 200px;
height: 300px;
background-image: url('path-to-your-playing-card-image.jpg');
background-size: cover;
animation: spin 5s linear infinite;
}
```

```
@keyframes spin {
0% {
transform: rotate(0deg);
}
100% {
transform: rotate(360deg);
}
}
```

Output :



Question 7

Code :

1. Index.html

```
<!DOCTYPE html>
```

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

```
<head>
```

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

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<link rel="stylesheet" href="styles.css">
<title>Sudhanshu Singh - Homepage</title>
</head>
<body>
  <header>
    <nav>
      <ul>
        <li><a href="index.html">Home</a></li>
        <li><a href="hobbies.html">Hobbies</a></li>
        <li><a href="teams.html">Teams</a></li>
      </ul>
    </nav>
  </header>

  <main>
    <section class="main-content">
      <h1>Welcome to Sudhanshu Singh Homepage</h1>
      <p>This is the main content of my homepage.</p>
    </section>
  </main>

  <footer>
    <p>&copy; 2024 Sudhanshu Singh. All rights reserved.</p>
  </footer>
</body>
</html>
```

2. hobbies.html

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

```
<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<link rel="stylesheet" href="styles.css">

<title>Hobbies</title>

</head>

<body>

<header>

<nav>

<ul>

<li><a href="index.html">Home</a></li>

<li><a href="hobbies.html">Hobbies</a></li>

<li><a href="teams.html">Teams</a></li>

</ul>

</nav>

</header>

<main>

<section class="main-content">

<h1>Welcome to Sudhanshu Singh Hobbies page</h1>

<p>All work and no play makes your life dull. So you need fun activities too. Hobbies are activities that are fun, entertaining and relaxing. Your hobby can be educative too. There are many kinds of hobbies. People pursue their hobbies with great passion and zest. Developing a hobby for your self will prove to be useful. Hobbies will help you use your leisure time gainfully. Your hobbies may be lifelong. You can pursue more than one hobby too.

Music, dance, reading, story writing, sports, philately, painting and theatre may all be hobbies. Interestingly, one person's profession may be another person's hobby. For instance, one could be a professional flautist, but for another playing the flute could be a hobby. A hobby is a fun activity that is pursued during one's leisure hours.</p>

</section>

</main>

<footer>
```

```
<p>&copy; 2024 Sudhanshu Singh. All rights reserved.</p>
</footer>
</body>
</html>
```

3. teams.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="styles.css">
  <title>Sudhanshu Singh - Favourite Teams</title>
</head>
<body>
  <header>
    <nav>
      <ul>
        <li><a href="index.html">Home</a></li>
        <li><a href="hobbies.html">Hobbies</a></li>
        <li><a href="teams.html">Teams</a></li>
      </ul>
    </nav>
  </header>

  <main>
    <section class="main-content">
      <h1>Welcome to Sudhanshu Singh Favourite Teams</h1>

      <p>Cricket is my favourite sport. Cricket is a sport that is widely played across the globe and it is played by everyone irrespective of their caste, creed or colour. It is also called the Gentleman's Game as it was played by British officers back in the 16th century.
```


I play cricket every day in the evening with my neighbourhood friends. Although we don't obey the rules of cricket, it is a great source of physical exercise and entertainment. We play in a team of 5 versus 5 whereas in this game of cricket each team has 11 members.</p>

</section>

</main>

<footer>

<p>© 2024 Sudhanshu Singh. All rights reserved.</p>

</footer>

</body>

</html>

4. style.css

body, h1, h2, h3, p, ul, li {

margin: 0;

padding: 0;

}

body {

font-family: 'Arial', sans-serif;

}

header {

background-color: #333;

color: #fff;

padding: 10px;

position: fixed;

width: 100%;

top: 0;

z-index: 1000;

}

nav ul {

```
list-style-type: none;  
}
```

```
nav ul li {  
    display: inline;  
    margin-right: 20px;  
}
```

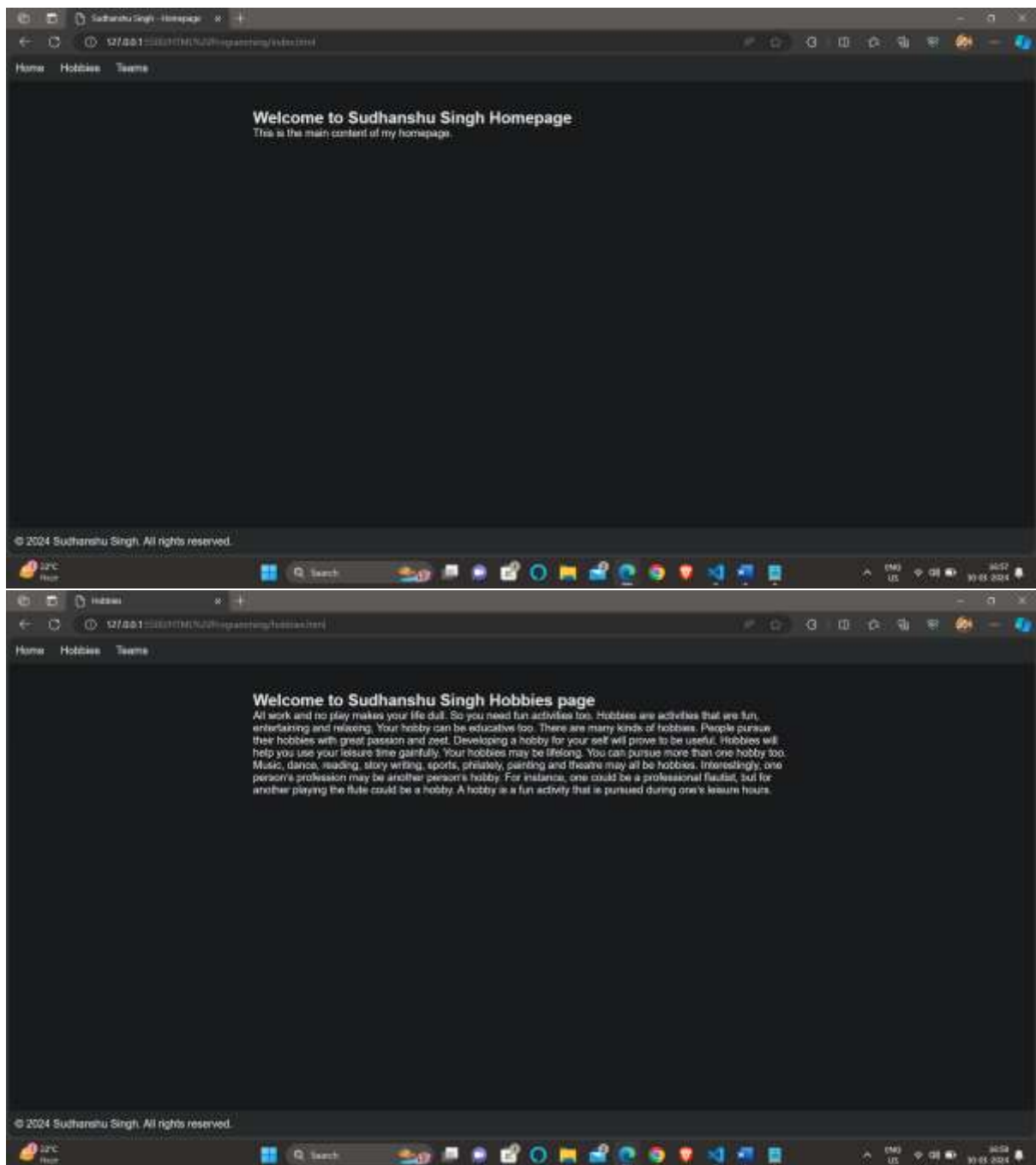
```
nav a {  
    text-decoration: none;  
    color: #fff;  
}
```

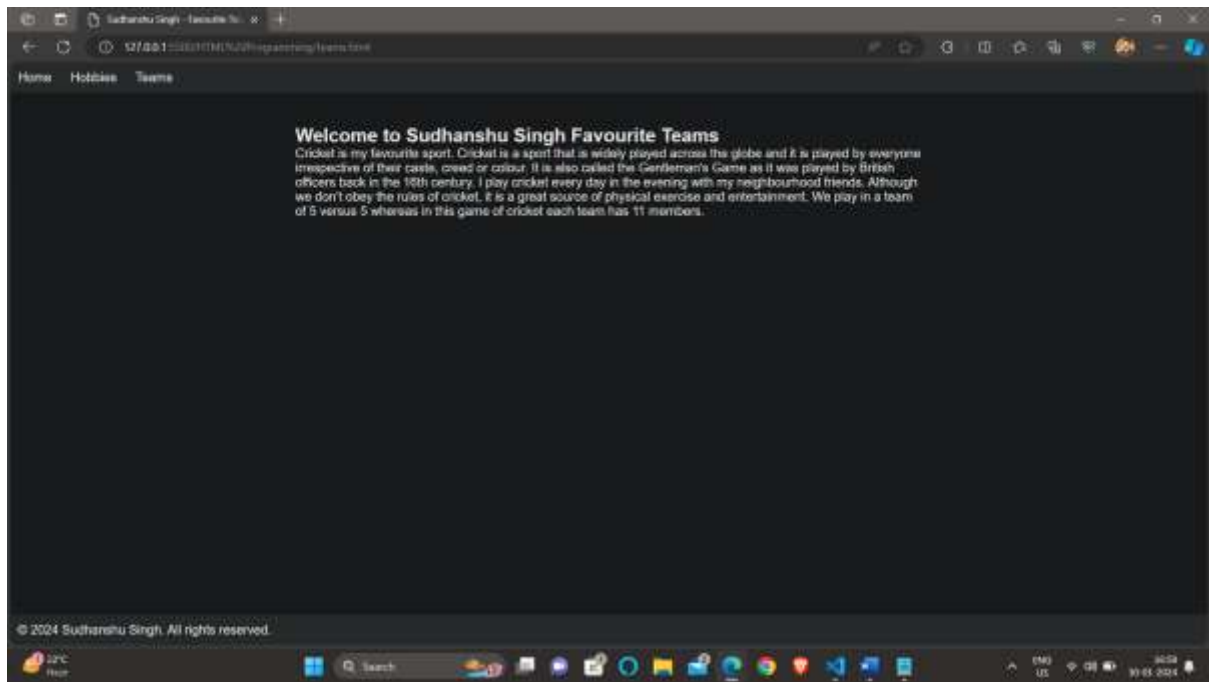
```
main {  
    margin-top: 60px; /* Adjust margin to account for fixed navbar */  
}
```

```
.main-content {  
    max-width: 800px;  
    margin: 0 auto;  
    padding: 20px;  
}
```

```
footer {  
    background-color: #333;  
    color: #fff;  
    padding: 10px;  
    position: fixed;  
    bottom: 0;  
    width: 100%;  
}
```

Output :





Question 8

Code :

```
<!DOCTYPE html>
```

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

```
<head>
```

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

```
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
  <title>Fundamentals of Web Programming</title>
```

```
  <style type='text/css'>
```

```
    body {
```

```
      background: #EEEEEE;
```

```
      color: #000000;
```

```
      font-family: 'Arial', sans-serif;
```

```
    }
```

```
    h1 {
```

```
    color: #AAA;
    border-bottom: 1px solid;
    margin-bottom: 0;
}
```

```
main {
    color: #CCC;
    margin-left: 7em;
    padding: 1px 0 1px 5%;
    border-left: 1px solid;
}
```

```
nav {
    background: #FDD;
    overflow: hidden;
}
```

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

```
nav li {
    float: left;
    position: relative;
    list-style: none;
    margin: 0;
    border-right: 1px solid #CCC;
}
```

```
nav ul ul {  
    display: none;  
    position: absolute;  
    top: 100%;  
    left: 0;  
}
```

```
nav li:hover {  
    background: #6F99F2;  
}
```

```
nav li.submenu {  
    background:  
url(https://runestone.academy/ns/books/published/webfundamentals/_static/submenu.gif  
) 95% 50% no-repeat;  
}
```

```
nav li.submenu:hover {  
    background-color: #EDD;  
}
```

```
nav li:hover>ul {  
    display: inherit;  
}
```

```
nav li a {  
    display: block;  
    padding: 0.25em 1em;  
    text-decoration: none;
```

```
    }
</style>
</head>

<body>

    <h1>Fundamentals of Web Programming</h1>

    <nav>
        <ul class='level1'>
            <li><a href='/'>Home</a></li>
            <li class='submenu'><a href='#'>Syllabus</a>
                <ul class='level2'>
                    <li><a href='#'>Text Book</a></li>
                    <li><a href='#'>Office Hours</a></li>
                    <li><a href='#'>Grading Policy</a></li>
                    <li><a href='#'>Learning Goals</a></li>
                </ul>
            </li>
            <li><a href='#'>Resources</a></li>
            <li class='submenu'><a href='#'>Publications</a>
                <ul class='level2'>
                    <li><a href='#'>Articles</a></li>
                    <li class='submenu'><a href='#'>Tutorials</a>
                        <ul class='level3'>
                            <li><a href='#'>HTML</a></li>
                            <li><a href='#'>CSS</a></li>
                            <li><a href='#'>SVG</a></li>
                            <li><a href='#'>XML</a></li>
                        </ul>
                    </li>
                </ul>
            </li>
        </ul>
    </nav>
</body>
</html>
```



```
</li>
<li><a href='#>Assignments</a></li>
</ul>
</li>
<li><a href='#>Contact</a></li>
</ul>
</nav>
```

```
<main>
```

```
<p>
```

Computer programming is the fundamental process of designing and building executable computer software to accomplish a specific task. At its core, programming involves creating sets of instructions, commonly referred to as code, that a computer can understand and execute. The key fundamentals of computer programming encompass various concepts and practices aimed at creating efficient, reliable, and scalable solutions.

Algorithmic thinking lies at the heart of programming, involving the systematic formulation of step-by-step procedures to solve problems or perform tasks. Breaking down complex problems into smaller, more manageable steps allows programmers to develop algorithms, the logical sequences that guide a computer through a series of operations.

Programming languages serve as the intermediary between human-readable code and machine-executable instructions. Understanding the syntax and semantics of a programming language is crucial for a programmer to convey their intentions accurately to the computer. Common programming languages like Python, Java, C++, and JavaScript each have their strengths and use cases, catering to diverse programming needs.

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</p>
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</main>
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</body>
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</html>
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Output :

