

Assignment – 1

| | |
|-----------------|-----------------------|
| Assignment Date | 29 September 2022 |
| Student Name | Sivanantha karthika B |
| Student Roll No | 812419104064 |
| Maximum Marks | 2 Marks |


Question-1:

Try and execute the programs below

- A. Chessboard
B. Tic-tac-toe

Solution:

A. Source code for Chessboard



The screenshot shows a web browser window with a chessboard. The browser's developer tools are open, displaying the HTML and CSS code for the chessboard. The HTML code defines a chessboard with a black and white square pattern. The CSS code defines the board's dimensions and the colors of the squares.

```
1 <html>
2
3 <head>
4   <meta charset="UTF-8">
5   <title>Chessboard using Pure CSS and HTML</title>
6
7   <style type="text/css">
8
9     .chessboard {
10       width: 640px;
11       height: 640px;
12       margin: 20px;
13       border: 25px solid #333;
14     }
15
16     .black {
17       float: left;
18       width: 80px;
19       height: 80px;
20       background-color: #999;
21       font-size: 50px;
22       text-align: center;
23       display: table-cell;
24       vertical-align: middle;
25     }
26
27     .white {
28       float: left;
29       width: 80px;
30       height: 80px;
31       background-color: #fff;
32       font-size: 50px;
33       text-align: center;
34       display: table-cell;
35       vertical-align: middle;
36     }
37
38   </style>
39
40 </head>
41
42 <body>
43
44   <div class="chessboard">
45     <!-- list -->
46     <div class="chessboard">
```

The image shows a web browser window with a chessboard on the left and its HTML source code on the right. The browser's address bar shows the URL `http://127.0.0.1:5555/`. The chessboard is a standard 8x8 grid with alternating light and dark squares. The source code is a single HTML document with a `<h1>Chessboard</h1>` tag and a `<div>` element containing the chessboard grid. The grid is composed of 64 `<div>` elements, each with a class attribute indicating its color (white or black) and a data attribute indicating its position (e.g., `data-pos="a1"`). The source code is displayed in a monospaced font, with line numbers on the left side of the editor.

File Edit View Encoding Language Settings Tools Macro Run Plugins Window ?

http://127.0.0.1:5555/

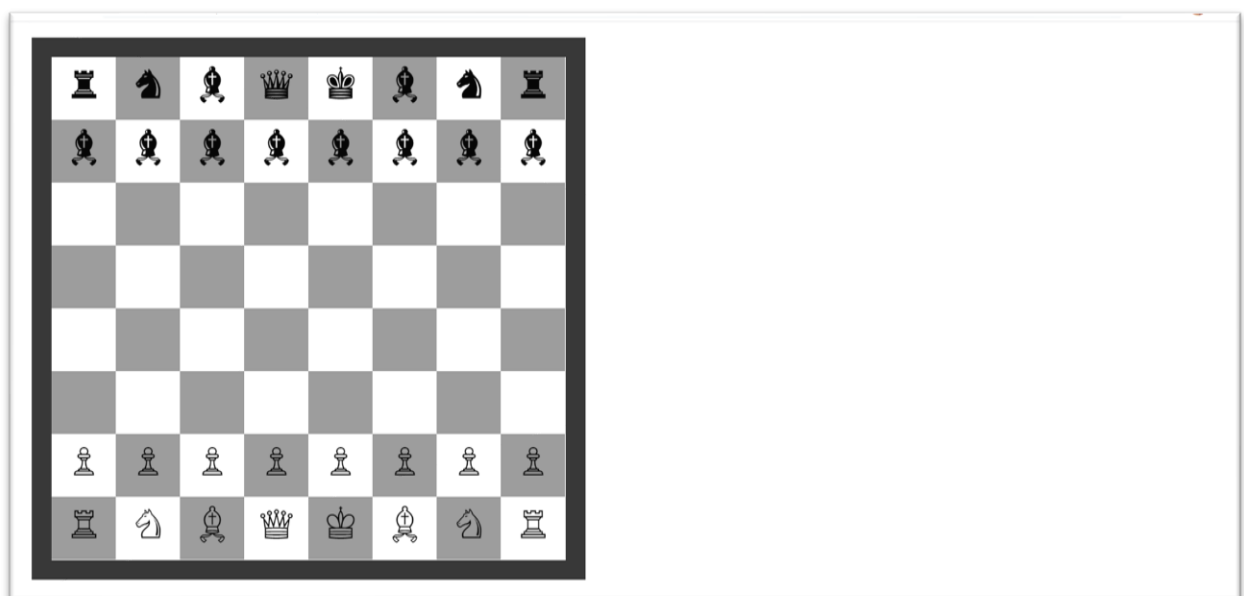
Chessboard

```
44 <div class="white"></div>
45 <div class="black"></div>
46 <div class="white"></div>
47 <div class="black"></div>
48 <div class="white"></div>
49 <div class="black"></div>
50 <div class="white"></div>
51 <div class="black"></div>
52 <!-- 2nd -->
53 <div class="black"></div>
54 <div class="white"></div>
55 <div class="black"></div>
56 <div class="white"></div>
57 <div class="black"></div>
58 <div class="white"></div>
59 <div class="black"></div>
60 <div class="white"></div>
61 <!-- 3th -->
62 <div class="white"></div>
63 <div class="black"></div>
64 <div class="white"></div>
65 <div class="black"></div>
66 <div class="white"></div>
67 <div class="black"></div>
68 <div class="white"></div>
69 <div class="black"></div>
70 <!-- 4th -->
71 <div class="black"></div>
72 <div class="white"></div>
73 <div class="black"></div>
74 <div class="white"></div>
75 <div class="black"></div>
76 <div class="white"></div>
77 <div class="black"></div>
78 <div class="white"></div>
79 <!-- 5th -->
80 <div class="white"></div>
81 <div class="black"></div>
82 <div class="white"></div>
83 <div class="black"></div>
84 <div class="white"></div>
85 <div class="black"></div>
86 <div class="white"></div>
87 <div class="black"></div>
```

Hyper Text Markup Language file length: 2.772 Lines: 117 Ln: 85 Col: 26 Pos: 1.891 Windows (CR LF) UTF-8

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
chessBoard.html
75 <div class="black"></div>
76 <div class="white"></div>
77 <div class="black"></div>
78 <div class="white"></div>
79 <!-- 5th -->
80 <div class="white"></div>
81 <div class="black"></div>
82 <div class="white"></div>
83 <div class="black"></div>
84 <div class="white"></div>
85 <div class="black"></div>
86 <div class="white"></div>
87 <div class="black"></div>
88 <!-- 6th -->
89 <div class="black"></div>
90 <div class="white"></div>
91 <div class="black"></div>
92 <div class="white"></div>
93 <div class="black"></div>
94 <div class="white"></div>
95 <div class="black"></div>
96 <div class="white"></div>
97 <!-- 7th -->
98 <div class="white">#9817</div>
99 <div class="black">#9817</div>
100 <div class="white">#9817</div>
101 <div class="black">#9817</div>
102 <div class="white">#9817</div>
103 <div class="black">#9817</div>
104 <div class="white">#9817</div>
105 <div class="black">#9817</div>
106 <!-- 8th -->
107 <div class="black">#9814</div>
108 <div class="white">#9816</div>
109 <div class="black">#9815</div>
110 <div class="white">#9813</div>
111 <div class="black">#9812</div>
112 <div class="white">#9815</div>
113 <div class="black">#9816</div>
114 <div class="white">#9814</div>
115 </div>
116 </body>
117 </html>
Hyper Text Markup Language file length: 2,772 lines: 117 Ln: 117 Col: 8 Pos: 2,773 Windows (CR LF) UTF-8 INS
```

Output for Chessboard



B. Source code for Tic-tac-toe

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
tic-tac-toe.html
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>tic-tac-toe</title>
8   <link rel="stylesheet" href="style.css">
9 </head>
10 <body>
11   <h1>Tic Tac Toe</h1>
12   <hr>
13   <hr>
14   <div id="board">
15
16   </div>
17   <script src="script.js"></script>
18 </body>
19 </html>
Hyper Text Markup Language file length: 446 lines: 19 Ln: 1 Col: 1 Pos: 1 Windows (CR LF) UTF-8 INS
```

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
body{
  font-family: Arial, Helvetica, sans-serif;
  text-align: center;
}
hr{
  width: 500px;
  height: 3px;
  background-color: black;
}
#board{
  width: 450px;
  height: 450px;
  margin: 0 auto;
  display: flex;
  flex-wrap: wrap;
}
.tile{
  width: 147px;
  height: 147px;
  font-size: 150px;
  display: flex;
  justify-content: center;
  align-items: center;
}
.horizontal-line{
  border-bottom: 3px solid black;
}
.vertical-line{
  border-right: 3px solid black;
}
.winner{
  background-color: lightgray;
  color: red;
}
```

Cascade Style Sheets File length: 602 lines: 35 Ln: 1 Col: 1 Pos: 1 Windows (CR LF) UTF-8 INS

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
var board;
var playerO = "o";
var playerX = "x";
var currPlayer = playerO;
var gameOver = false;

window.onload = function(){
  setGame();
}

function setGame(){
  board = [
    [' ',' ',' '],
    [' ',' ',' '],
    [' ',' ',' ']
  ]
  for (let r=0; r<3; r++){
    for (let c=0; c<3; c++){
      let tile = document.createElement("div");
      tile.id = r.toString() + "-" + c.toString();
      tile.classList.add("tile");
      if (r==0 || c==0){
        tile.classList.add("horizontal-line");
      }
      if (c==0 || c==2){
        tile.classList.add("vertical-line");
      }
      tile.addEventListener("click", setTile);
      document.getElementById("board").append(tile);
    }
  }
}

function setTile(){
  if (gameOver){
    return;
  }
  let coords = this.id.split("-");
  let r = parseInt(coords[0]);
  let c = parseInt(coords[1]);
  if (board[r][c] != ' '){
    return;
  }
}
```

JavaScript file length: 2,835 lines: 99 Ln: 1 Col: 1 Pos: 1 Windows (CR LF) UTF-8 INS

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
return;
}

board[r][c] = currPlayer;
this.innerText = currPlayer;

if (currPlayer==playerO){
  currPlayer = playerX;
}
else{
  currPlayer = playerO;
}
checkWinner();

function checkWinner(){
  for (let r=0; r<3; r++){
    if (board[r][0] == board[r][1] && board[r][1] == board[r][2] && board[r][0] != ' '){
      for (let i=0; i<3; i++){
        let tile = document.getElementById(r.toString() + "-" + i.toString());
        tile.classList.add("winner");
      }
      gameOver = true;
      return;
    }
  }
  for (let c=0; c<3; c++){
    if (board[0][c] == board[1][c] && board[1][c] == board[2][c] && board[0][c] != ' '){
      for (let i=0; i<3; i++){
        let tile = document.getElementById(i.toString() + "-" + c.toString());
        tile.classList.add("winner");
      }
      gameOver = true;
      return;
    }
  }
  if (board[0][0] == board[1][1] && board[1][1] == board[2][2] && board[0][0] != ' '){
    for (let i=0; i<3; i++){
      let tile = document.getElementById(i.toString() + "-" + c.toString());
      tile.classList.add("winner");
    }
    gameOver = true;
    return;
  }
  if (board[0][2] == board[1][1] && board[1][1] == board[2][0] && board[0][2] != ' '){
    for (let i=0; i<3; i++){
      let tile = document.getElementById(i.toString() + "-" + c.toString());
      tile.classList.add("winner");
    }
    gameOver = true;
    return;
  }
}
```

JavaScript file length: 2,835 lines: 99 Ln: 85 Col: 1 Pos: 2,369 Windows (CR LF) UTF-8 INS

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
[scripts.js]
68 for(let c=0;c<3;c++){
69   if(board[0][c] == board[1][c] && board[1][c] == board[2][c] && board[c][0] != ' '){
70     for(let i=0;i<3;i++){
71       let tile = document.getElementById(i.toString() + "-" + c.toString());
72       tile.classList.add("winner");
73     }
74     gameOver = true;
75     return;
76   }
77 }
78 if(board[0][0] == board[1][0] && board[1][0] == board[2][0] && board[0][0] != ' '){
79   for(let i=0;i<3;i++){
80     let tile = document.getElementById(i.toString() + "-" + 0.toString());
81     tile.classList.add("winner");
82   }
83   gameOver = true;
84   return;
85 }
86 if(board[0][2] == board[1][2] && board[1][2] == board[2][2] && board[0][2] != ' '){
87   for(let i=0;i<3;i++){
88     let tile = document.getElementById(i.toString() + "-" + 2.toString());
89     tile.classList.add("winner");
90   }
91   tile = document.getElementById("1-1");
92   tile.classList.add("winner");
93   tile = document.getElementById("2-0");
94   tile.classList.add("winner");
95 }
96 }
97 }
98 }
99 }
```

JavaScript file length: 2,835 lines: 99 Ln: 68 Col: 28 Pos: 1,690 Windows (CR LF) UTF-8 INS

Output for Tic-tac-toe

| Tic Tac Toe | | |
|-------------|---|---|
| O | X | O |
| X | O | X |
| O | X | O |

Question-2:

Design a webpage which displays your timetable using tables in HTML

Solution:

Source code for Timetable

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
<!--DOCTYPE html-->
<html>
<body>
<h1>TIME TABLE</h1>
<table border="5" cellpadding="0" align="center">
<!--<caption>timetable</caption-->
<tr>
<td align="center" height="50"
width="100"><br>
<b>Day/Period</b></td>
<td align="center" height="50"
width="100">
<b>I</b><br>9:30-10:20</td>
<td align="center" height="50"
width="100">
<b>II</b><br>10:20-11:10</td>
<td align="center" height="50"
width="100">
<b>III</b><br>11:10-12:00</td>
<td align="center" height="50"
width="100">
<b>IV</b><br>12:40-1:30</td>
<td align="center" height="50"
width="100">
<b>V</b><br>1:30-2:20</td>
<td align="center" height="50"
width="100">
<b>VI</b><br>2:20-3:10</td>
<td align="center" height="50"
width="100">
<b>VII</b><br>3:10-4:00</td>
</tr>
</table>
</body>
</html>
```

Hyper Text Markup Language file length: 3,069 lines: 122 Ln: 1 Col: 16 Pos: 16 Windows (CR LF) UTF-8 INS

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
</tr>
<tr>
<td align="center" height="50">
<b>Monday</b></td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Che</td>
<td rowspan="6" align="center" height="50">
<h2>L<br>U<br>N<br>C<br>R</h2>
</td>
<td colspan="3" align="center"
height="50">LAB</td>
<td align="center" height="50">Phy</td>
</tr>
<tr>
<td align="center" height="50">
<b>Tuesday</b></td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Che</td>
<td align="center" height="50">SPORTS</td>
</tr>
<tr>
<td align="center" height="50">
<b>Wednesday</b></td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Phy</td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Che</td>
<td colspan="3" align="center"
height="50">LIBRARY</td>
</tr>
<tr>
<td align="center" height="50">
<b>Thursday</b></td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Phy</td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Che</td>
</tr>
<tr>
<td align="center" height="50">
<b>Friday</b></td>
<td align="center" height="50">LAB</td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Phy</td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Che</td>
</tr>
<tr>
<td align="center" height="50">
<b>Saturday</b></td>
<td align="center" height="50">LAB</td>
<td align="center" height="50">SEMINAR</td>
<td align="center" height="50">SPORTS</td>
</tr>
</table>
</body>
</html>
```

Hyper Text Markup Language file length: 3,069 lines: 122 Ln: 44 Col: 18 Pos: 980 Windows (CR LF) UTF-8 INS

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
</tr>
<tr>
<td align="center" height="50">
<b>Thursday</b></td>
<td align="center" height="50">Phy</td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Che</td>
<td colspan="3" align="center"
height="50">LAB</td>
<td align="center" height="50">Mat</td>
</tr>
<tr>
<td align="center" height="50">
<b>Friday</b></td>
<td align="center" height="50">LAB</td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Che</td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Phy</td>
</tr>
<tr>
<td align="center" height="50">
<b>Saturday</b></td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Che</td>
<td align="center" height="50">Mat</td>
<td colspan="3" align="center"
height="50">SEMINAR</td>
<td align="center" height="50">SPORTS</td>
</tr>
</table>
</body>
</html>
```

Hyper Text Markup Language file length: 3,069 lines: 122 Ln: 82 Col: 14 Pos: 2,056 Windows (CR LF) UTF-8 INS

Output for Timetable

TIME TABLE

| Day/Period | I 9:30-10:20 | II 10:20-11:10 | III 11:10-12:00 | 12:00-12:40 | IV 12:40-1:30 | V 1:30-2:20 | VI 2:20-3:10 | VII 3:10-4:00 |
|------------|-----------------|-------------------|--------------------|-----------------------|------------------|----------------|-----------------|------------------|
| Monday | Eng | Mat | Che | L U N C H | LAB | | | Phy |
| Tuesday | LAB | | | | Eng | Che | Mat | SPORTS |
| Wednesday | Mat | phy | Eng | | Che | LIBRARY | | |
| Thursday | Phy | Eng | Che | | LAB | | | Mat |
| Friday | LAB | | | | Mat | Che | Eng | Phy |
| Saturday | Eng | Che | Mat | | SEMINAR | | | SPORTS |

Question-3:

Design a registration webpage using HTML, CSS and JavaScript

Solution:

Source code for registration webpage

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
home.html
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>website</title>
8   <link rel="stylesheet" href="style.css">
9 </head>
10 <body>
11   <div class="main">
12     <div class="navbar">
13       <div class="icon">
14         <img alt="Hotel logo" data-bbox="140 620 160 640"/>
15       </div>
16       <div class="menu">
17         <ul>
18           <li><a href="#">Home</a></li>
19           <li><a href="#">About</a></li>
20           <li><a href="#">Service</a></li>
21           <li><a href="#">Contact</a></li>
22         </ul>
23       </div>
24     </div>
25     <div class="food">
26       <h3>Today's Special</h3>
27       <ol>
28         <li>Biryani</li>
29         <li>Chicken Rice</li>
30         <li>Noodles</li>
31         <li>Barotha</li>
32         <li>Pizza</li>
33       </ol>
34     </div>
35     <div class="offer">
36       <h2>Today's offer</h2>
37       <ol>
38         <li>1.Buy 1 Large pizza ***** Get 100ml 7up free</li>
39         <li>1.Buy 1 bucket biryani ***** Get 1 lollipop free</li>
40         <li>1.Buy 10 paratha ***** Get 1 paratha free</li>
41       </ol>
42     </div>
43   </div>
44 </body>
45 </html>
```

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
home.html
19 <li><a href="#">About</a></li>
20 <li><a href="#">Service</a></li>
21 <li><a href="#">Contact</a></li>
22
23 </ul>
24 </div>
25
26 <div class="food">
27 <h3>Today's Special</h3>
28 <ol>
29 <li>Biryani</li>
30 <li>Chicken Rice</li>
31 <li>Noodles</li>
32 <li>Paratha</li>
33 <li>Pizza</li>
34 </ol>
35 </div>
36 <div class="offer">
37 <h3>Today's offer</h3>
38 <ol>
39 <li>1.Buy 1 Large pizza ***** Get 100ml 7up free</li>
40 <li>1.Buy 1 bucket biryani ***** Get 1 lollipop free</li>
41 <li>1.Buy 10 paratha ***** Get 1 paratha free</li>
42 </ol>
43 </div>
44 <div class="contact">
45 <h3>Feedback form</h3>
46 <label for="name">Name</label>
47 <input type="text">
48 <label for="Feedback">Feedback</label>
49 <input type="text">
50 <button type="submit"> <a href="feedback form.html">submit </a></button>
51 </div>
52 </div>
53 <script src="/script1.js"></script>
54 </body>
55 </html>
56
Hyper Text Markup Language file length:1940 lines:56 Ln:19 Col:52 Pos:606 Windows (CR LF) UTF-8 INS
```

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
form.html
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8">
5 <meta http-equiv="X-UA-Compatible" content="IE=edge">
6 <meta name="viewport" content="width=device-width, initial-scale=1.0">
7 <title>Form</title>
8 <script type="text/javascript" src="script.js"></script>
9 </head>
10 <body>
11 <div id="error"></div>
12 <form id="form" action="/" method="GET">
13 <div>
14 <label for="name">Name</label>
15 <input id="name" name="name" type="text" required>
16 </div>
17 <div>
18 <label for="password">Password</label>
19 <input id="password" name="password" type="password" required>
20 </div>
21 <div>
22 <button type="submit"> <a href="home.html">Submit</a></button>
23 </div>
24 </form>
25 </body>
26 </html>
27
Hyper Text Markup Language file length:769 lines:26 Ln:1 Col:1 Pos:1 Windows (CR LF) UTF-8 INS
```

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
feedback form.html
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8">
5 <meta http-equiv="X-UA-Compatible" content="IE=edge">
6 <meta name="viewport" content="width=device-width, initial-scale=1.0">
7 <title>Feedback</title>
8 </head>
9 <body>
10 <div>
11 <h1>your feedback was submitted successfully</h1>
12 </div>
13 </body>
14 </html>
15
Hyper Text Markup Language file length:349 lines:14 Ln:1 Col:1 Pos:1 Windows (CR LF) UTF-8 INS
```

CSS File

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
form.html feedback form.html style.css
1 {
2   margin: 0;
3   padding: 0;
4 }
5
6
7
8 .main{
9   width: 100%;
10  background: url(img2.jpg);
11  background-position: center;
12  background-size: cover;
13  height: 100vh;
14 }
```

Cascade Style Sheets File length: 106 lines: 13 Ln: 1 Col: 1 Pos: 1 Windows (CR LF) UTF-8 INS

JavaScript File

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
form.html feedback form.html style.css script.js
1 const name = document.getElementById('name')
2 const password = document.getElementById('password')
3 const form = document.getElementById('form')
4 const errorElement = document.getElementById('error')
5
6 form.addEventListener('submit', (e) => {
7   let messages=[]
8   if (name.value === '' || name.value == null) {
9     messages.push('name is required')
10  }
11  if (password.value.length <= 6) {
12    messages.push('password must be longer than 6 charecters')
13  }
14  if (password.value.lenth >= 20){
15    messages.push('password must be less than 20 charecters')
16  }
17  if (password.value === 'password'){
18    messages.push('password cannot be password')
19  }
20  if (messages.lenth > 0) {
21    e.preventDefault()
22    errorElement.innerText = messages.join(', ')
23  }
24 })
```

JavaScript file length: 815 lines: 24 Ln: 1 Col: 1 Pos: 1 Windows (CR LF) UTF-8 INS

Output for registration webpage

Hotel

[Home](#)
[About](#)
[Service](#)
[Contact](#)

Today's Special

Biryani
Chicken Rice
Noodles
barotha
pizza

Today's offer

1.Buy 1 Large pizza ***** Get 100ml 7up free
1.Buy 1 bucket briyani ***** Get 1 lollipop free
1.Buy 10 paratha ***** Get 1 paratha free

Feedback form

Name Feedback

Name

Password

your feedback was submitted successfully