Assignment – 1

Assignment Date	29 September 2022
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Maximum Marks	2 Marks

Question-1:

Try and execute the programs below

A. Chessboard
B. Tic-tac-toe

Solution:

A. Source code for 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="white">&#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>
```

Output for Chessboard

B. Source code for 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       <br>
14       <div id="board">
15
16       </div>
17       <script src="script.js"></script>
18   </body>
19   </html>
```
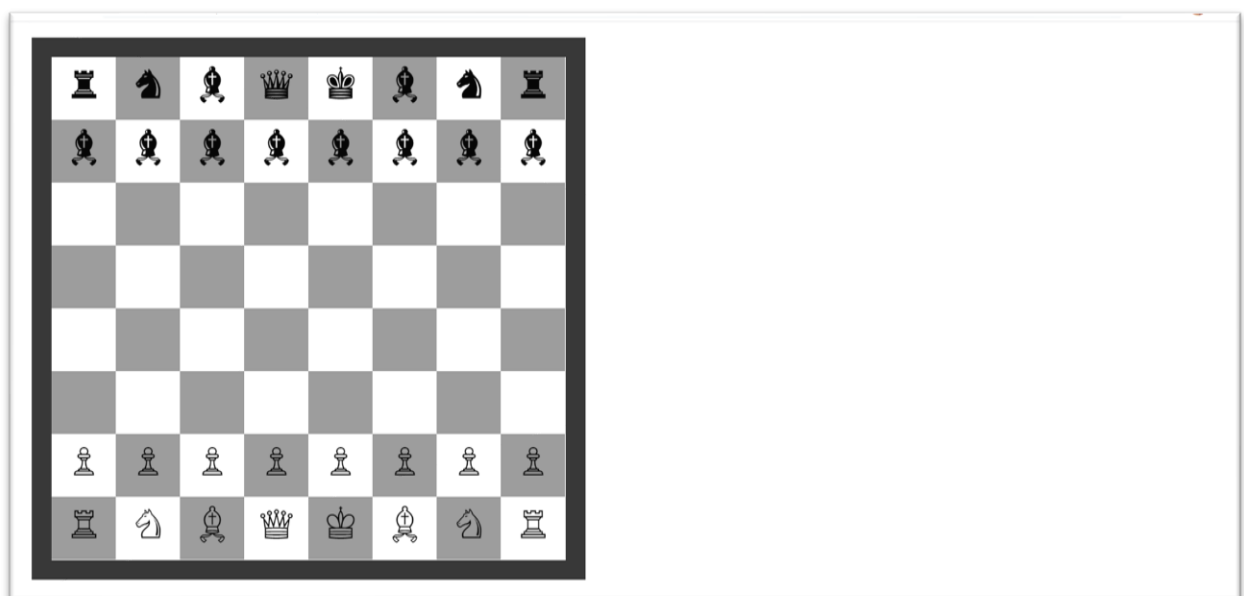
```css
body{
    font-family: Arial, Helvetica, sans-serif;
    text-align: center;
}
hr{
    width: 500px;
    height: 3px;
    background-color: black;
}
#board{
    width: 450px;
    height: 450px;
    margin: 0 auto;
    display: flex;
    flex-wrap: wrap;
}
.tile{
    width: 147px;
    height: 147px;
    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;
}
```

```javascript
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 || r==1){
                tile.classList.add("horizontal-line");
            }

            if (c==0 || c==1){
                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;
    }

    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[c][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][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;
    }
```

scriptjs

```
for(let c=0;c<3 ; c++){
    if(board[0][c] == board[1][c] && board[1][c] == board[2][c] && board[c][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][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] != ' '){

        let tile = document.getElementById("0-2");
        tile.classList.add("winner");

        tile = document.getElementById("1-1");
        tile.classList.add("winner");

        tile = document.getElementById("2-0");
        tile.classList.add("winner");
    }
}
```

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 ?

timetable.html

```html
<!DOCTYPE html>
<html>

<body>
    <h1>TIME TABLE</h1>
    <table border="5" cellspacing="0" align="center">
        <!--<caption>Timetable</caption>-->
        <tr>
            <td align="center" height="50"
                width="100"><br>
                <b>Day/Period</b></br>
            </td>
            <td align="center" height="50"
                width="100">
                <b>I<br>9:30-10:20</b>
            </td>
            <td align="center" height="50"
                width="100">
                <b>II<br>10:20-11:10</b>
            </td>
            <td align="center" height="50"
                width="100">
                <b>III<br>11:10-12:00</b>
            </td>
            <td align="center" height="50"
                width="100">
                <b>12:00-12:40</b>
            </td>
            <td align="center" height="50"
                width="100">
                <b>IV<br>12:40-1:30</b>
            </td>
            <td align="center" height="50"
                width="100">
                <b>V<br>1:30-2:20</b>
            </td>
            <td align="center" height="50"
                width="100">
                <b>VI<br>2:20-3:10</b>
            </td>
            <td align="center" height="50"
                width="100">
                <b>VII<br>3:10-4:00</b>
            </td>
        </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>H</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 colspan="3" align="center"
                height="50">LAB
            </td>
            <td align="center" height="50">Eng</td>
            <td align="center" height="50">Che</td>
            <td align="center" height="50">Mat</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">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 colspan="3" 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>
```

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		LAB			Phy
Tuesday		LAB			Eng	Che	Mat	SPORTS
Wednesday	Mat	phy	Eng	L U N C H	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


```
     <!DOCTYPE html>
     <html lang="en">
     <head>
         <meta charset="UTF-8">
         <meta http-equiv="X-UA-Compatible" content="IE=edge">
         <meta name="viewport" content="width=device-width, initial-scale=1.0">
         <title>website</title>
         <link rel="stylesheet" href="style.css">
     </head>
     <body>
         <div class="main">
             <div class="navbar">
                 <div class="icon">
                     <h1 class="logo">Hotel</h1>
                 </div>
                 <div class="menu">
                     <ul>
                         <li ><a href="#">Home</a></li>
                         <li ><a href="#">About</a></li>
                         <li ><a href="#">Service</a></li>
                         <li ><a href="#">Contact</a></li>

                     </ul>
                 </div>

                 <div class="food">
                     <h3>Today's Special</h3>
                     <ol>
                         <li>Briyani</li>
                         <li>Chicken Rice</li>
                         <li>Noodles</li>
                         <li>barotha</li>
                         <li>pizza</li>
                     </ol>
                 </div>
                 <div class="offer">
                     <h2>Today's offer</h2>
                     <ol>
                         <li>1.Buy 1 Large pizza ***** Get 100ml 7up free</li>
                         <li>1.Buy 1 bucket briyani ***** Get 1 lolipop free</li>
                         <li>1.Buy 10 paratha ***** Get 1 paratha free</li>
                     </ol>
                 </div>
```

```html
            <li ><a href="#">About</a></li>
            <li ><a href="#">Service</a></li>
            <li ><a href="#">Contact</a></li>

        </ul>
    </div>

    <div class="food">
        <h3>Today's Special</h3>
        <ol>
            <li>Briyani</li>
            <li>Chicken Rice</li>
            <li>Noodles</li>
            <li>barotha</li>
            <li>pizza</li>
        </ol>
    </div>
    <div class="offer">
        <h2>Today's offer</h2>
        <ol>
            <li>1.Buy 1 Large pizza ***** Get 100ml 7up free</li>
            <li>1.Buy 1 bucket briyani ***** Get 1 lolipop free</li>
            <li>1.Buy 10 paratha ***** Get 1 paratha free</li>
        </ol>
    </div>
    <div class="contact">
        <h2>Feedback form</h2>
        <label for="name">Name</label>
        <input type="text">
        <label for="Feedback">Feedback</label>
        <input type="text">
        <button type="submit" > <a href="feedback form.html">submit </a></button>
    </div>
</div>
    <script src="/script1.js"></script>
</body>
</html>
```

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Form</title>
    <script  type="text/javascript" src="script.js"> </script>
</head>
<body>
    <div id="error"></div>
<form id="form" action="/" method="GET">
    <div>
        <label for="name">Name</label>
        <input id="name" name="name" type="text" required>
    </div>
    <div>
        <label for="password">Password</label>
        <input id="password" name="password" type="password" required>
    </div>
    <div>
        <button type="submit"> <a href="home.html">Submit</a></button>
    </div>
</form>
</body>
</html>
```

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Feedback</title>
</head>
<body>
    <div>
        <h1>your feedback was submited successfully</h1>
    </div>
</body>
</html>
```

CSS File

```css
*{
    margin: 0;
    padding: 0;
}

.main{
    width: 100%;
    background: url(img2.jpg);
    background-position: center;
    background-size: cover;
    height: 109vh;
}
```

JavaScript File

```javascript
const name = document.getElementById('name')
const password = document.getElementById('password')
const form = document.getElementById('form')
const errorElement = document.getElementById('error')

form.addEventListener('submit',(e) => {
    let messages=[]
    if (name.value === '' || name.value == null) {
        messages.push('name is required')
    }
    if (password.value.length <=6){
        messages.push('password must be longer than 6 charecters')
    }
    if (password.value.lenth >= 20){
        messages.push('password must be less than 20 charecters')
    }
    if (password.value === 'password'){
        messages.push('password cannot be password')
    }
    if (messages.lenth > 0) {
        e.preventDefault()
        errorElement.innerText = messages.join(', ')
    }
})
```

Output for registration webpage

Hotel

Home
About
Service
Contact

Today's Special

Briyani
Chicken Rice
Noodles
barotha
pizza

Today's offer

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

Feedback form

Name [   ] Feedback [   ] [submit >]

Name [_____]
Password [_____]
[Submit>]

---

your feedback was submited successfully

Name [_____]
Password [_____]
[Submit>]