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200905130

Section : C2

Roll no. : 23

OST-LAB – 7

Lab – 6 pending question :

15. Making the HTML5 page more stylish using CSS
- Using inline style - style attribute
 - Using embedded style
 - Link to an external style sheet – Link element

Html code :

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>Question Seven</title>
```

```
<link rel="stylesheet" type="text/css" href="index.css">
```

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

```
body{
```

```
background-color:mediumorchid;
```

```
}
```

```
div{
```

```
border: 2px solid blue;
```

```
border-radius: 5px;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
<h1 style="text-align: center;">This is a h1 tag</h1>
<h2>This is a h2 tag</h2>
<h3>This is a h3 tag</h3>
<h4>This is a h4 tag</h4>
<h5>This is a h5 tag</h5>
<h6>This is a h6 tag</h6>

<p style="font-family: sans-serif;">This is the p tag. We can write multiple
paragraphs here.</p>

<p><b>This is bold text</b></p>

<p><i>This is italic text</i></p>

<p>This is<sup>superscript</sup> text</p>

<p>THis is<sub>subscript</sub> text</p>

<pre>
This
is
a
preformatted
text
</pre>

<p style="text-align: right;">This text is <del>left</del><ins>right</ins> to
left</p>

<div>This is a div <span>(This is a span element(inline element))</span>
element (block
element)</div>

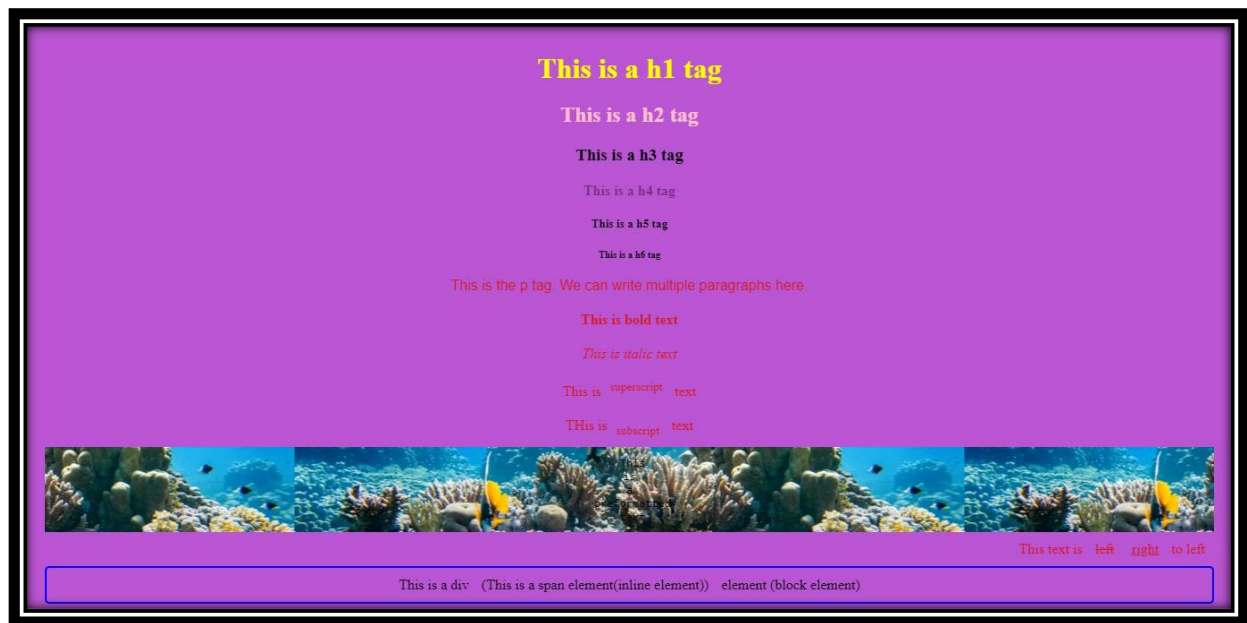
</body>

</html>
```

CSS code :

```
*{  
    padding:10px;  
    margin: 0px;  
    text-align: center;  
}  
p{  
    color: rgb(214, 25, 25);  
}  
h1{  
    color:yellow;  
}  
h2{  
    color:pink;  
}  
h4{  
    opacity: 0.4;  
}  
  
pre{  
    background-image: url(index1.jpg);  
    background-position: center;  
}
```

Output :



Lab 7 Exercises :

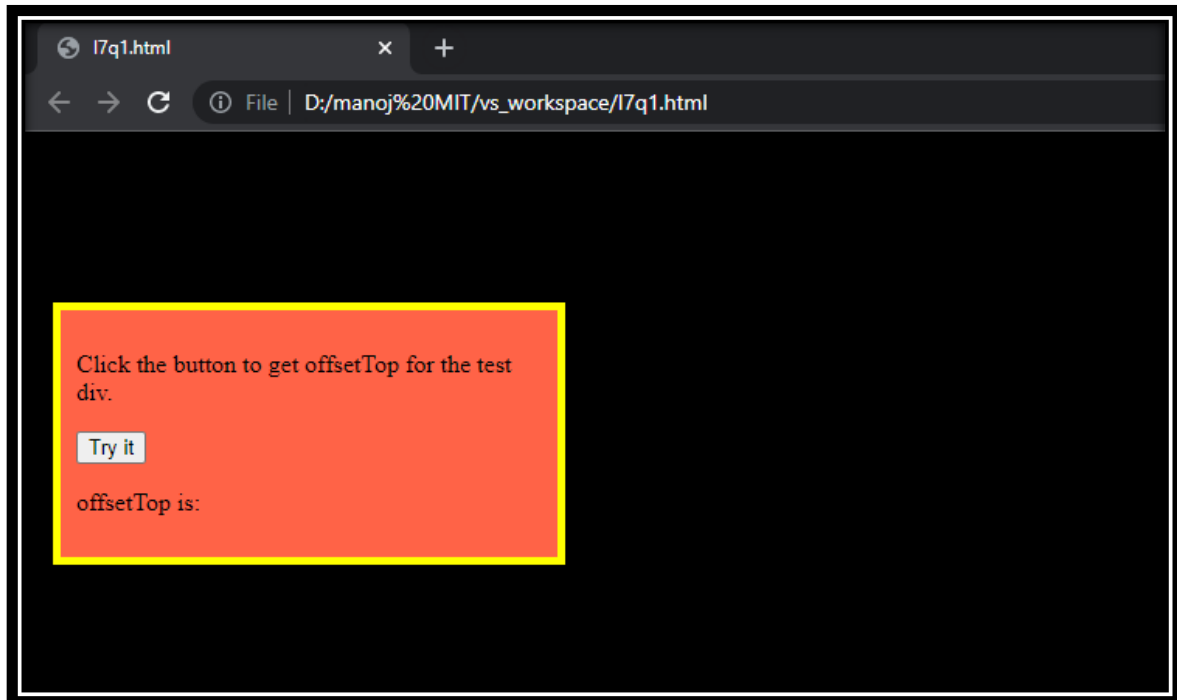
- 1) Create an HTML5 document to get an HTML5 element's position on the web page with the help of CSS and JavaScript function.

Html code :

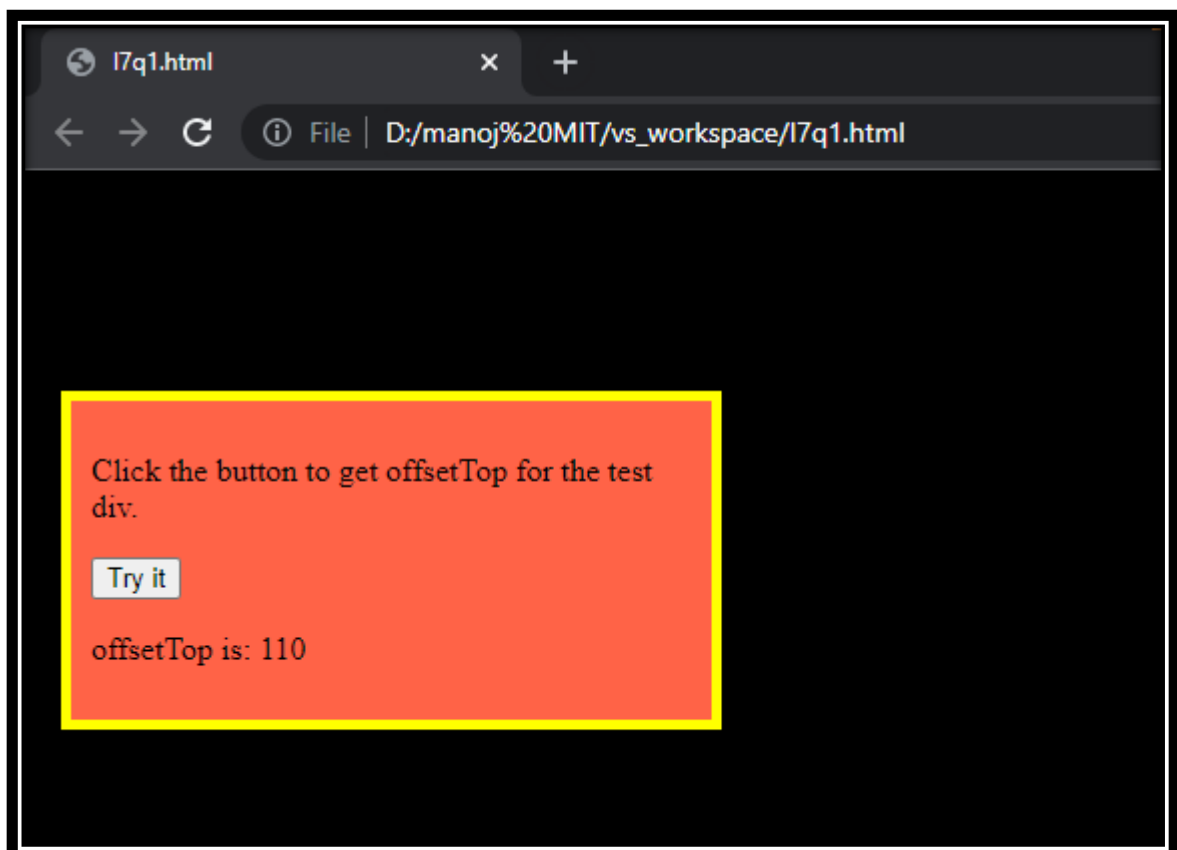
```
<!DOCTYPE html>
<html>
<head>
<style>
body{
background-color: black;
}
#test {
top: 100px;
margin: 10px;
```

```
padding: 10px;
width: 300px;
position: relative;
border: 5px solid yellow;
background-color: tomato;
}
</style>
</head>
<body>
<div id="test">
<p>Click the button to get offsetTop for the test div.</p>
<p><button onclick="myFunction()">Try it</button></p>
<p>offsetTop is: <span id="demo"></span></p>
</div>
<script>function myFunction() {
var testDiv = document.getElementById("test");
document.getElementById("demo").innerHTML = testDiv.offsetTop;
}
</script>
</body>
</html>
```

Output :



After clicking “Try it” button,



2) Write a JavaScript program to "Wish a User" at different hours of a day. Use appropriate dialog boxes for wishing the user. Display the dynamic clock on the web page. Make use of CSS and HTML5 elements for creative and attractive designs

Html code :

```
<!DOCTYPE html>

<html>

<head>

<title>Greetings</title>

<style>

*{

box-sizing: border-box;

background-color: black;

}

#hello{

border:2px solid tomato;

background-color: royalblue;

}

div#Heading{

font-weight: bold;

text-align: left;

font-size: 1rem;

margin:10px;

background-color: royalblue;

}

#text{

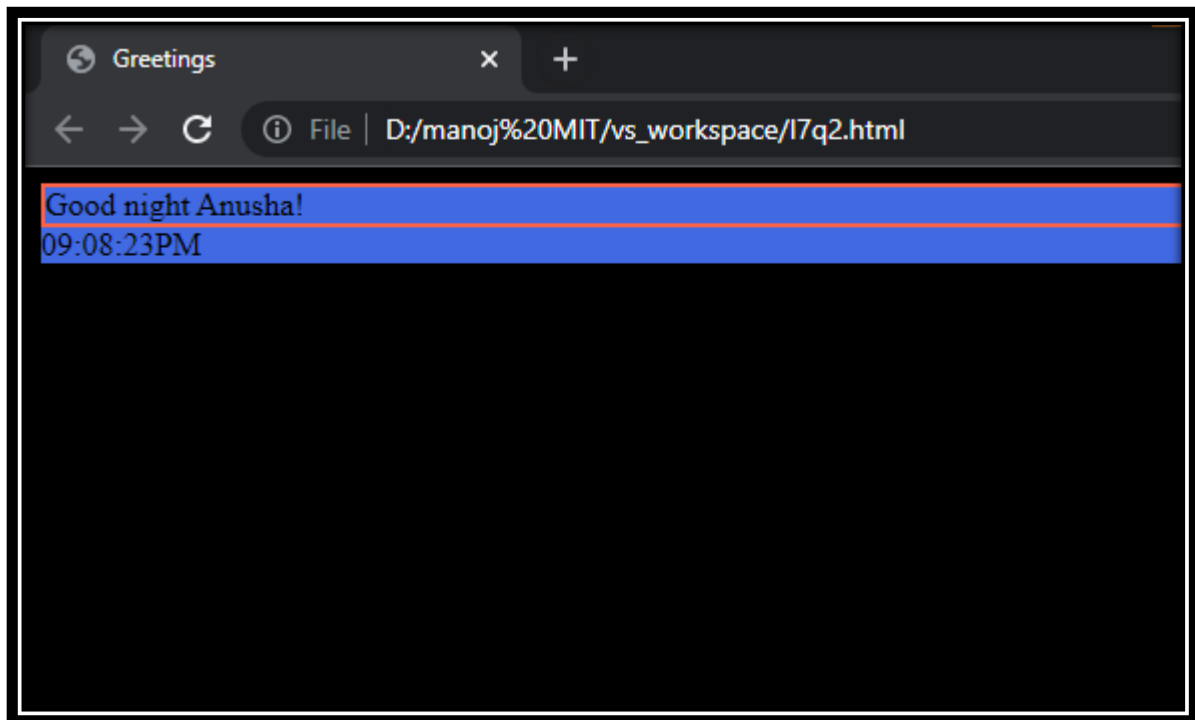
font-weight: bold;
```

```
text-align: left;
font-size: 1rem;
margin: 10px;
background-color: royalblue;
}
#clock{
font-size: 1em;
background-color: royalblue;
}
</style>
</head>
<body>
<div id="hello"></div>
<div id="clock"></div>
</body>
<script>
setInterval(showTime, 1000);
function showTime() {
let time = new Date();
let hour = time.getHours();
let min = time.getMinutes();
let sec = time.getSeconds();
let Greetings;
am_pm = "AM";
if (hour > 12) {
hour -= 12;
am_pm = "PM";
```



```
}  
if (hour == 0) {  
    hr = 12;  
    am_pm = "AM";  
}  
hour = hour < 10 ? "0" + hour : hour;  
min = min < 10 ? "0" + min : min;  
sec = sec < 10 ? "0" + sec : sec;  
if(am_pm=="AM")  
    Greetings="Good morning Anusha!"  
else if(hour<5)  
    Greetings="Good afternoon Anusha!"  
else if(hour<8)  
    Greetings="Good evening Anusha!"  
else  
    Greetings="Good night Anusha!"  
let currentTime = hour + ":"  
+ min + ":" + sec + am_pm;  
document.getElementById("clock")  
.innerHTML = currentTime;  
document.getElementById("hello").innerHTML=Greetings  
}  
showTime();  
</script>  
</html>
```

Output :



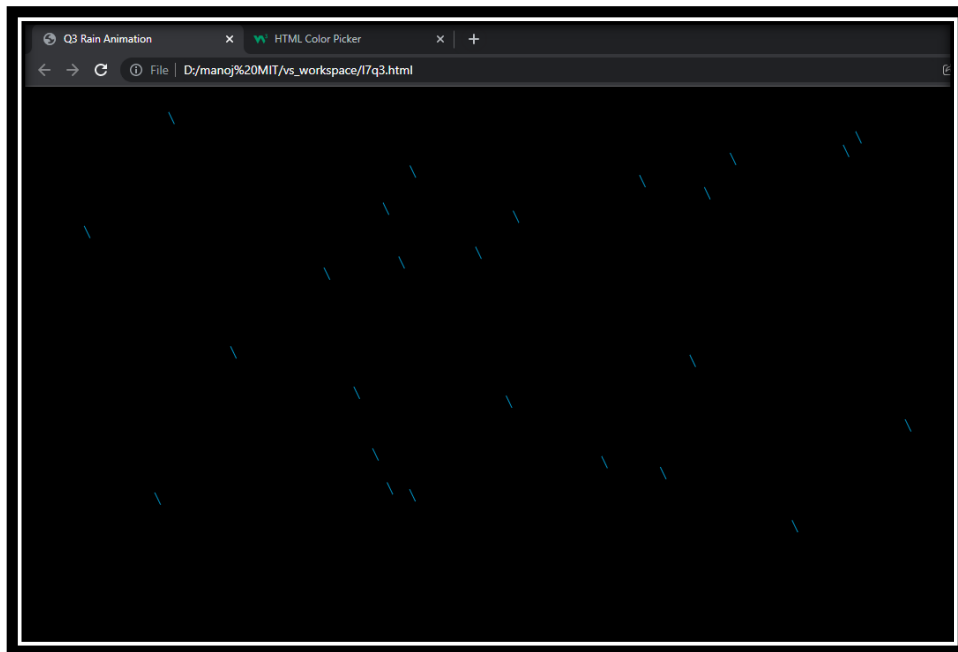
3) Create an animation of rain using HTML5 canvas element.
Apply appropriate usage of CSS and Javascript function to develop the animation.

Html code :

```
<!DOCTYPE html>
<html>
<head>
<title>Q3 Rain Animation</title>
<style>
body{
background-color: black;
}
</style>
</head>
```

```
<body onload="rain()">
<script type="text/javascript">
var n = 1;
function rain() {
this.rain_len = 15;
this.rain_ang = Math.PI/2.8;
var ctx = myCanvas.getContext('2d');
var x = Math.random() * 1000;
var y = Math.random() * 500;
ctx.strokeStyle = "#0099cc";
ctx.beginPath();
ctx.moveTo(x,y);
ctx.lineTo(x-Math.cos(this.rain_ang)*this.rain_len,y-
Math.sin(this.rain_ang)*this.rain_len);
ctx.stroke();
n = n + 1;
if (n == 50) {
ctx.clearRect(0, 0, 1500, 1000);
n = 1;
}
var t = setTimeout(rain, 3);
}
</script>
<canvas id="myCanvas" width="1500" height="600"></canvas>
</body>
</html>
```

Output :



4) Create an HTML 5 document that displays a bouncing ball.
Use HTML5 elements, CSS and JavaScript functions.

Html code :

```
<!DOCTYPE HTML>

<html>

<head>

<title>Q4 : Bouncing Ball Animation</title>

<style>

canvas {

background-color: green;

width: 600px;

height: 400px;

}

</style>

</head>

<body>
```

<h2>Ball Bouncing off the edges using JS and CSS</h3>

<canvas></canvas>

<script>

```
var canvas = document.querySelector("canvas");
```

```
canvas.width = window.innerWidth;
```

```
canvas.height = window.innerHeight;
```

```
var l = canvas.getContext('2d');
```

```
var x = Math.floor(Math.random() * innerWidth);
```

```
var y = Math.floor(Math.random() * innerHeight);
```

```
var vx = Math.floor(Math.random() * 4);
```

```
var vy = Math.floor(Math.random() * 4);
```

```
var radius = 30;
```

```
move();
```

```
function move() {requestAnimationFrame(move);
```

```
l.clearRect(0, 0, innerWidth, innerHeight);
```

```
l.beginPath();
```

```
l.strokeStyle = "black";
```

```
l.arc(x, y, radius, 0, Math.PI * 2, false);
```

```
l.stroke();
```

```
l.fillStyle="red";
```

```
l.fill();
```

```
if (radius + x > innerWidth)
```

```
vx = 0 -vx;
```

```
if (x -radius < 0)
```

```
vx = 0 -vx;
```

```
if (y + radius > innerHeight)
```

```
vy = 0 -vy;
```

```
if (y - radius < 0)
```

```
vy = 0 -vy;
```

```
x = x + vx;
```

```
y = y + vy;
```

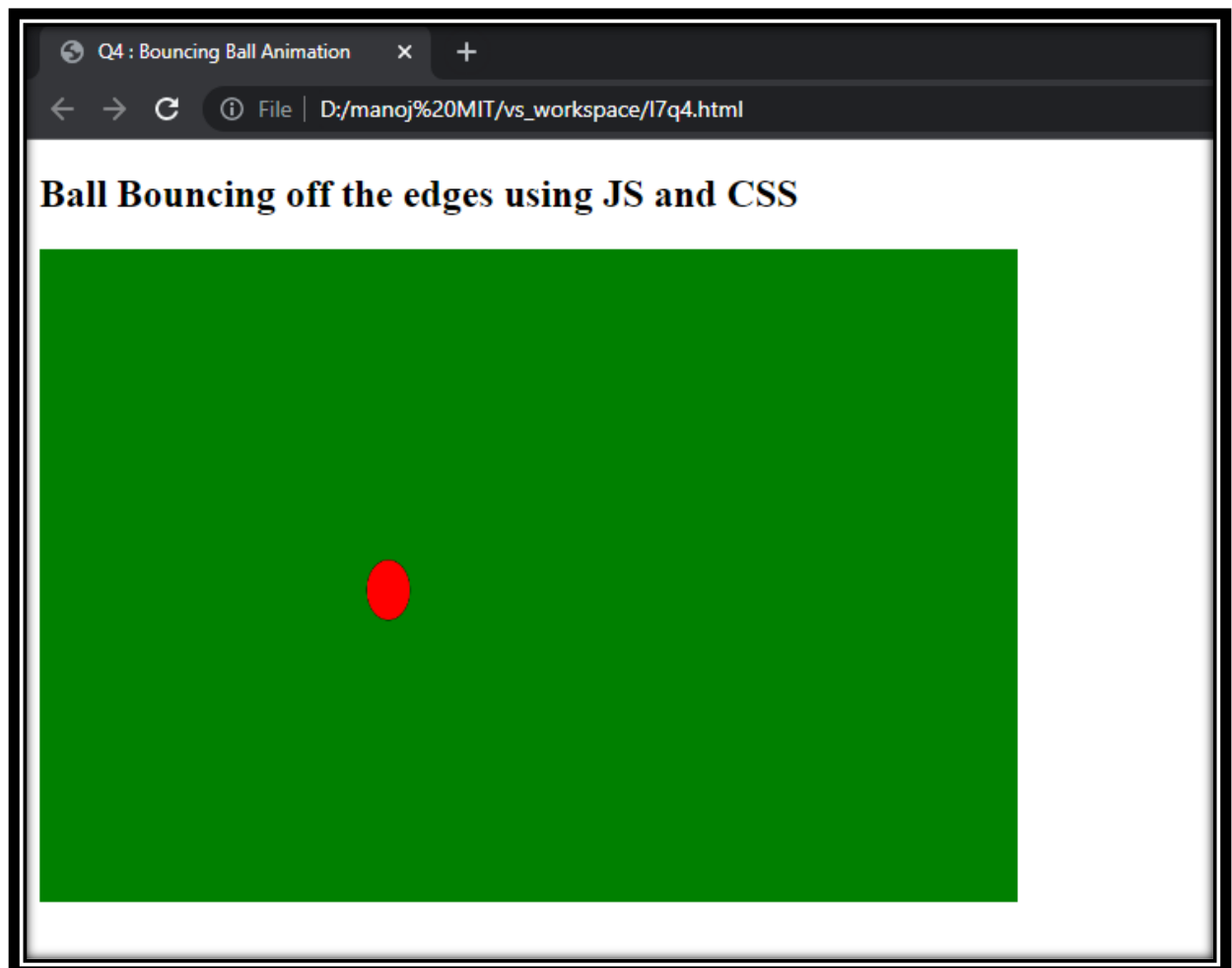
```
}
```

```
</script>
```

```
</body>
```

```
</html>
```

Output :



5) Develop a color picker using HTML5 elements, CSS and JavaScript functions.

Html code :

```
<!DOCTYPE html>

<html>
<head>
<style>
body{
background-color:hotpink;
}
</style>
<title>Q5 : Pick a color</title>
</head>
<body><h3>Choose your chocolate's colors:</h3>
<div><input type="color" id="ice" name="ice" value="#664228"><label
for="ice">Brown</label></div>
<div><input type="color" id="milk" name="milk" value="#FFA500"><label
for="milk">Orange</label></div>
</body>
</html>
```

Output :

