OSTL

Week 7

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CSE C3

Roll Number 64

1.

Filename: index.html

```html
<!DOCTYPE html>
<html>
<head>
<style>
#test {
top: 200px;
margin: 60px;
padding: 20px;
width: 400px;
position: relative;
border: 2px solid #10a729;
border-radius: 10px;
}
</style>
<title>Week7 Q1</title>
</head>
<body>
<div id="test">
```

```
<p><i>Click the button to get the left and top offsets for the test div.</i></p>

<p><button onclick="myFunction()">Click here</button></p>

<p>offsetTop is: <span id="demo"></span></p>

<p>offsetLeft is: <span id="demo2"></span></p>

</div>

<script>function myFunction() {

var testDiv = document.getElementById("test");

document.getElementById("demo").innerHTML = testDiv.offsetTop;

document.getElementById("demo2").innerHTML = testDiv.offsetLeft;

}

</script>

</body>

</html>
```
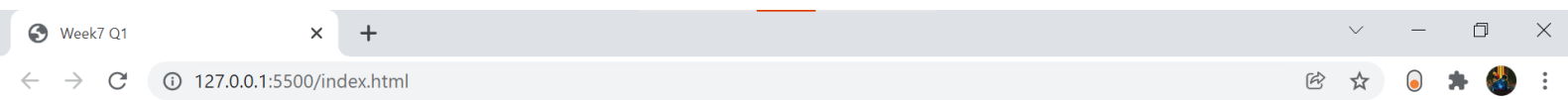
Click the button to get the left and top offsets for the test div.

Click here

offsetTop is: 260

offsetLeft is: 68

2.

Filename: q2.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" />
    <link rel="stylesheet" href="styles.css" />
    <title>Week7 Q2</title>
</head>

<body>
    <div>
        <h1 class="heading">Hey there! Welcome aboard</h1>
        <p>Wishing you the very best!<br><br>The time is<span id="span"></span>
        </p>
    </div>

    <script src="index.js">
    </script>
</body>

</html>
```

Filename: styles.css

```css
* {
    font-family: Montserrat, 'Times New Roman', Times, serif;
    box-sizing: border-box;
    margin: 20px 0px;
    padding: 0px 10px;
}


.heading {
    background: #FF1F1F;
    background: -webkit-radial-gradient(circle farthest-corner at center center, #FF1F1F 0%, #70A9FF 100%);
    background: -moz-radial-gradient(circle farthest-corner at center center, #FF1F1F 0%, #70A9FF 100%);
    background: radial-gradient(circle farthest-corner at center center, #FF1F1F 0%, #70A9FF 100%);
    -webkit-background-clip: text;
    -webkit-text-fill-color: transparent;
}

p {
    font-size: 24px;
    background: #6112FF;
    background: -webkit-linear-gradient(to left, #6112FF 70%, #50BA5B 100%);
    background: -moz-linear-gradient(to left, #6112FF 70%, #50BA5B 100%);
    background: linear-gradient(to left, #6112FF 70%, #50BA5B 100%);
    -webkit-background-clip: text;
    -webkit-text-fill-color: transparent;
}
```
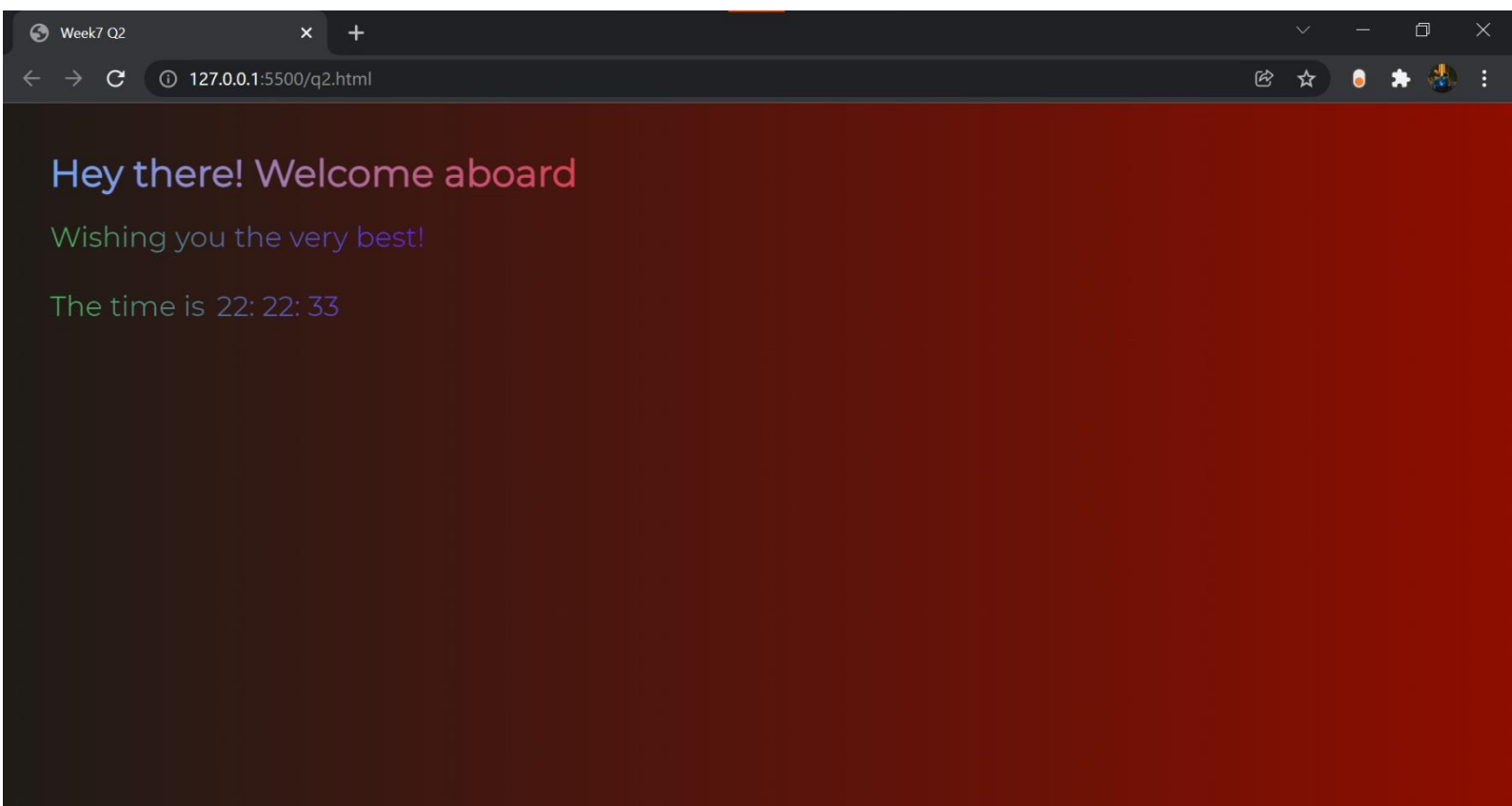
```css
body {
    background: #8E0E00;
    background: -webkit-linear-gradient(to right, #1F1C18, #8E0E00);
    background: linear-gradient(to right, #1F1C18, #8E0E00);
}
```

Filename: index.js

```javascript
var span = document.getElementById("span");

function time() {
    var d = new Date();
    var s = d.getSeconds();
    var m = d.getMinutes();
    var h = d.getHours();
    span.textContent =
        ("0 " + h).substr(-2) +
        ": " +
        ("0 " + m).substr(-2) +
        ": " +
        ("0 " + s).substr(-2);
}

setInterval(time, 0);
```

Hey there! Welcome aboard

Wishing you the very best!

The time is 22: 22: 33

3.

Filename: q3.html

<!DOCTYPE html>

<html>

<head>

   <meta charset="utf-8">

   <meta name="viewport" content="width=device-width, initial-scale=1">

   <title>Week7 Q3</title>

</head>

<body onload="rain()" style="background-color: black;">

```html
<script type="text/javascript" src="scripts.js">
</script>
<canvas id="myCanvas" width="1000" height="500"></canvas>
</body>


</html>
```
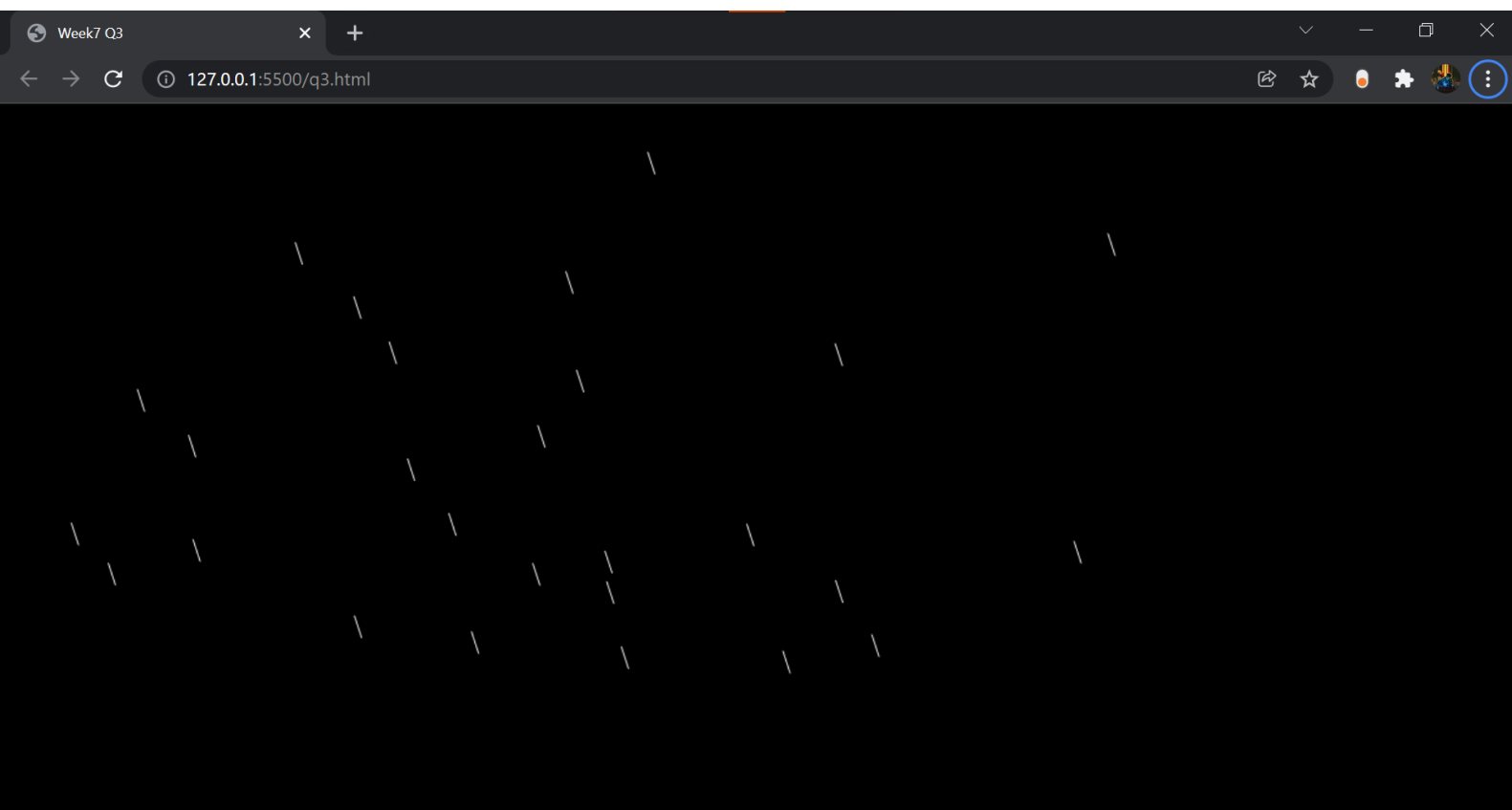
Filename: scripts.js

```javascript
var n = 1;
function rain() {
    this.rain_len = 20;

    this.rain_ang = Math.PI / 2.5;

    var ctx = myCanvas.getContext('2d');

    var x = Math.random() * 1000;

    var y = Math.random() * 600;

    ctx.strokeStyle = "white";

    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, 1000, 500);

        n = 1;    }

    var t = setTimeout(rain, 3);

}
```

4.

Filename: q4.html

<!DOCTYPE html>

<html>

<head>

   <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

   <title>Week7 Q4</title>

   <link rel="stylesheet" href="q4.css">

</head>

<body>

```html
    <h1>Bouncing Ball animation using HTML5, CSS & JS</h1>

    <div id="container">
      <canvas id="myCanvas" width="300" height="300"></canvas>
    </div>

</body>
<script src="q4.js"></script>

</html>
```

Filename: q4.css

```css
body {
   background-color: #ededed;
}

h1 {
   display: block;
   width: 600px;
   margin: 20px auto;
   padding-bottom: 20px;
   font-family: Montserrat;
   font-size: 24px;
   color: #333;
   text-shadow: 1px 2px 3px #ccc;
   border-bottom: 1px solid #cbcbcb;
}
```

```css
#container {
    width: 600px;
    margin: 0 auto;
}


#myCanvas {
    background: #fff;
    border: 1px solid #cbcbcb;
}
```
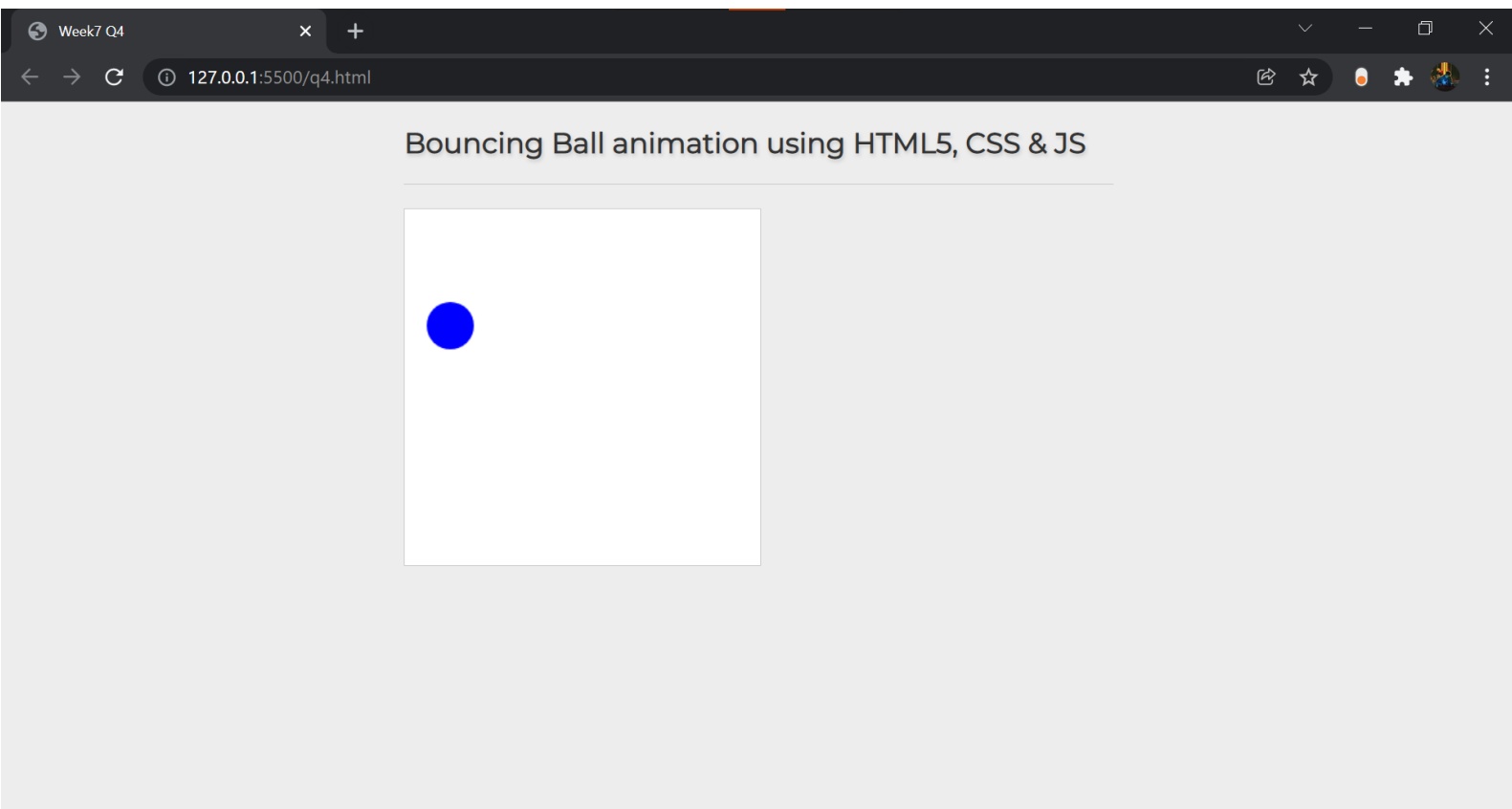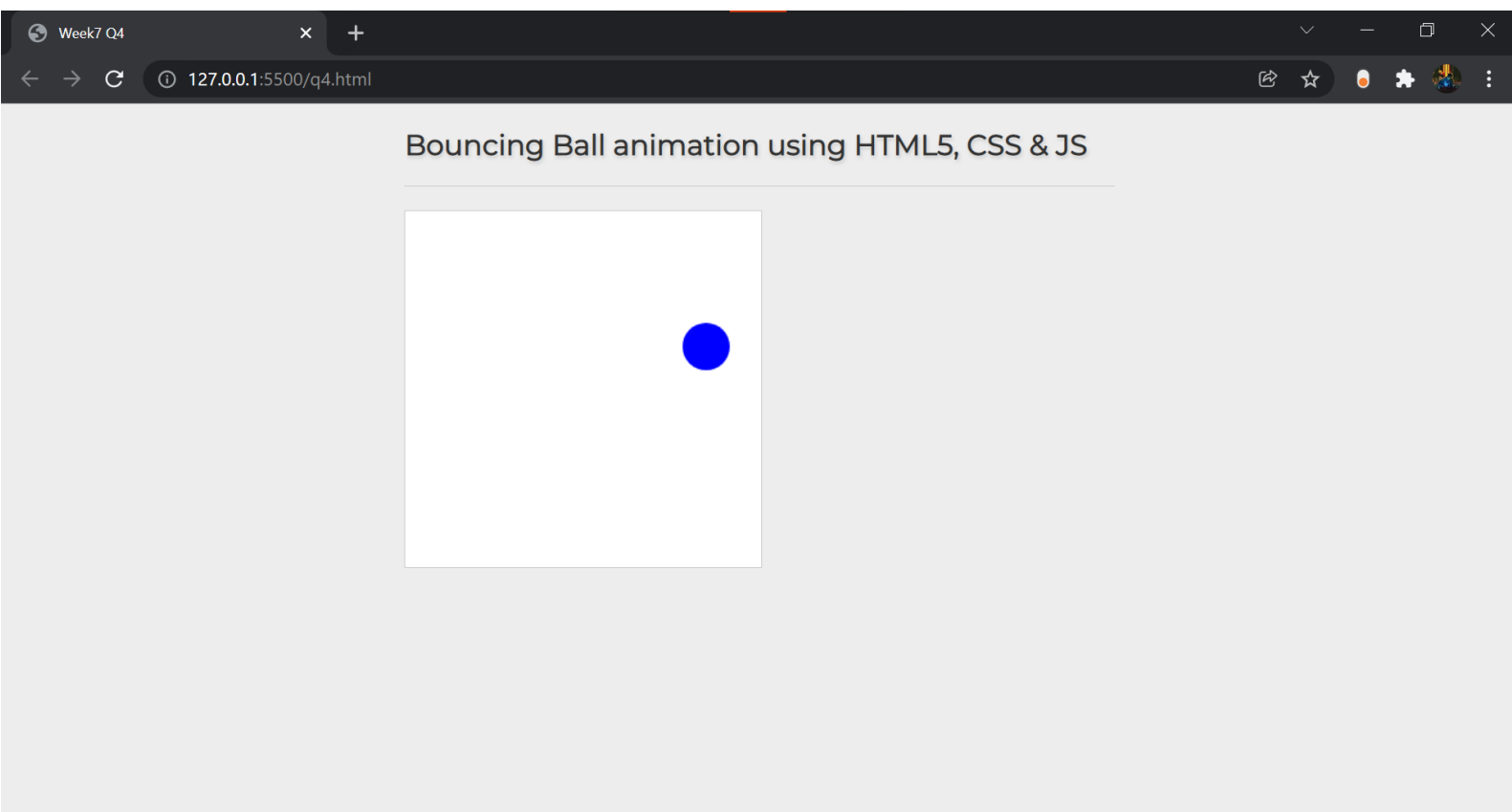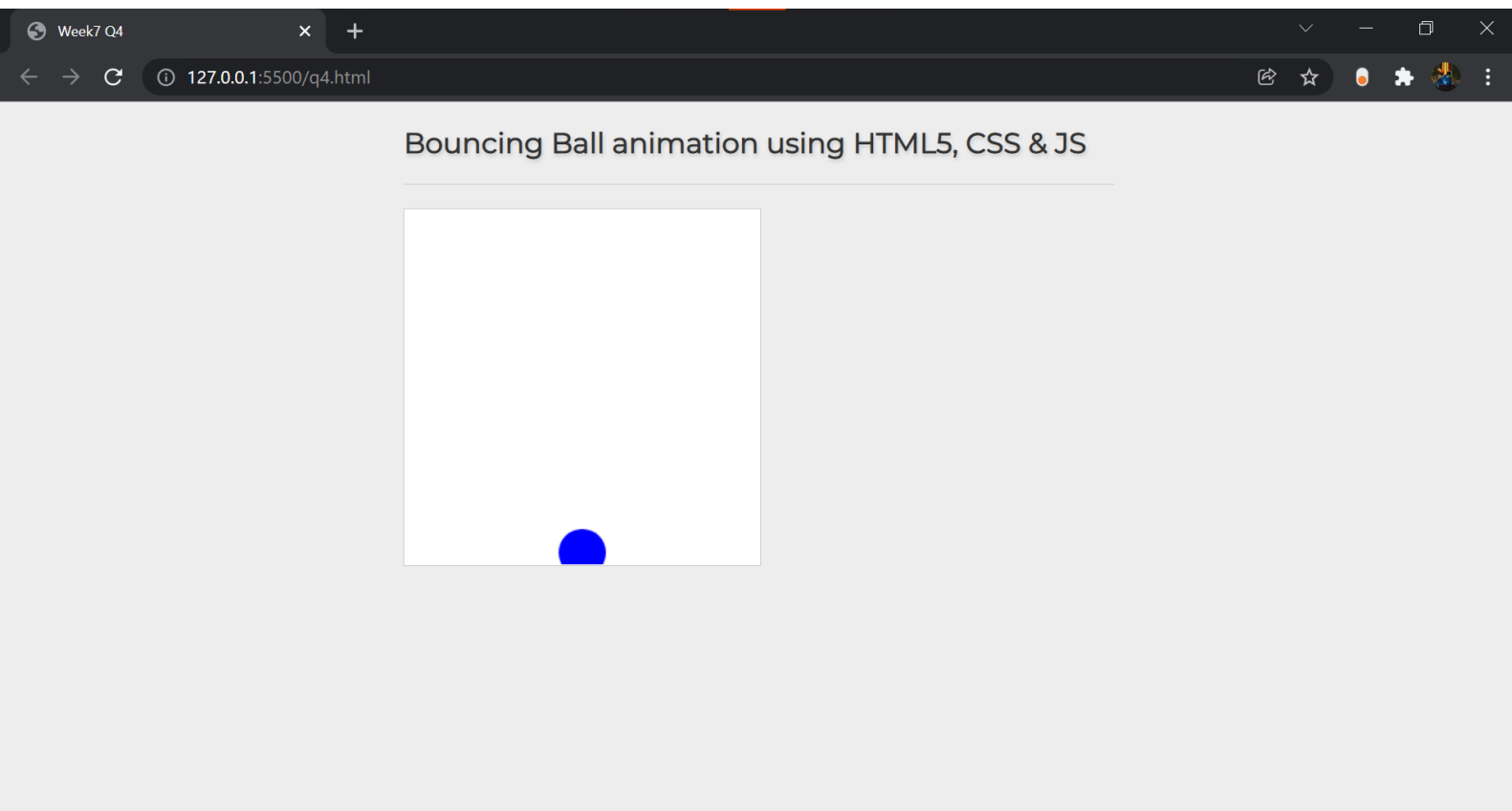
Filename: q4.js

```javascript
var context;
var dx = 4;
var dy = 4;
var y = 150;
var x = 10;


function draw() {
    context = myCanvas.getContext('2d');
    context.clearRect(0, 0, 300, 300);
    context.beginPath();
    context.fillStyle = "#0000ff";
    context.arc(x, y, 20, 0, Math.PI * 2, true);
    context.closePath();
    context.fill();
    if (x < 0 || x > 300)
        dx = -dx;
    if (y < 0 || y > 300)
```

```
        dy = -dy;

    x += dx;

    y += dy;

}

setInterval(draw, 15);
```

127.0.0.1:5500/q4.html

Bouncing Ball animation using HTML5, CSS & JS

127.0.0.1:5500/q4.html

Bouncing Ball animation using HTML5, CSS & JS

5.

Filename: q5.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>Week7 Q5</title>
    <link rel="stylesheet" href="q5.css">
</head>

<body>
    <div class="container">
        <h1>Color Picker</h1>
        <div class="color-picker">
            <h2>Input HEX values</h2>
            <form>
                <label for="r">Red</label>
                <input name="r" class="color-picker-r" value="0"></input>
                <label for="g">Green</label>
                <input name="g" class="color-picker-g" value="0"></input>
                <label for="b">Blue</label>
                <input name="b" class="color-picker-b" value="0"></input>
                <input type="submit" value="Submit" id="submit"></input>
            </form>
```

```html
            <div id="selected-color"></div>
          </div>
      </div>
  </body>
  <script src="q5.js">
  </script>


  </html>
```

Filename: q4.css

```css
.container {
    width: 100%;
    height: 100%;
    display: flex;
    flex-direction: column;
    justify-content: center;
    align-items: center;
}

h1 {
    font-family: Montserrat;
    color: brown;
}

#selected-color {
    width: 300px;
    height: 300px;
    margin-top: 1rem;
```

```
    border-radius: 1rem;

}
```

Filename: q5.js

```javascript
const r = document.querySelector(".color-picker-r");

const g = document.querySelector(".color-picker-g");

const b = document.querySelector(".color-picker-b");

document.getElementById("submit").addEventListener("click", function(event) {

    event.preventDefault()

    if (r.value < 0 || r.value > 255 || g.value < 0 || g.value > 255 || b.value <

        0 || b.value > 255) {

        alert("Please enter a value between 0 and 255")

    } else {

        document.getElementById("selected-color").style.backgroundColor =

            `rgb(${r.value},${g.value},${b.value})`;

    }

});
```

127.0.0.1:5500/q5.html

Color Picker

Input HEX values

Red `0` Green `0255` Blue `0255` Submit