HTML & CSS LAB Programs

Course Title: Multimedia Animation Lab	Course code: CAC11P
Total Contact Hours: 52	Course Credits: 02
Formative Assessment Marks: 25	Duration of SEE/Exam: 03 Hours
Summative Assessment Marks: 25	

Part-A

1. Write an HTML program to create and display navigations menus using list tags and anchor tag

2. Write an HTML program to display multi-media data (text, images, audios, videos, gifs, etc.) on a webpage

3. Write an HTML program to create student Registrations form on submitting the form check whether fields are empty or not using JavaScript. If any fields are empty display an error message

4. Write an HTML program to create biodata (CV or Resume) and to change the following CSSproperties

- Font
- Text
- Background

5. Write an HTML program to create div and apply the following CSS properties on created div

- Margin
- Padding
- Border
- Box shadow

6. Write an HTML program to create a box and using CSS transform and transition properties move the box to the center of the web page on loading webpage

7. Write an HTML program to create a circle and create an animation of bouncing of the circle for10 sec

8. Write an HTML program to create page loading animations,

Part-B

1. Write an HTML program to draw line, polyline and rectangle and fill rectangle with red color using svg tag.

2. Write an HTML program to draw star and multiple circle and with different color using svg tag Write an HTML program to create logo with linear gradient properties using svg tag.

3. Write an HTML program to draw Square and Rectangle using canvas tag and JavaScript

4. Write an HTML program to draw Bezier curve using canvas tag and JavaScript

5. Write an HTML Program to import an external image into a canvas and then to draw on that image

6. Write an HTML program to draw a rectangle box using canvas and to change background color to red, scale of the rectangle to 2 on move-over (hover)properties.

7. Write an html program to draw a circle using canvas and to apply the rotations animations on loading the page.

EVALUATION SCHEME FOR LAB EXAMINATION:

Assessment Criteria	Marks
Writing 2 Programs	10
Execution of 1 Program	10
Viva and Record	05
Total	25

PART-A

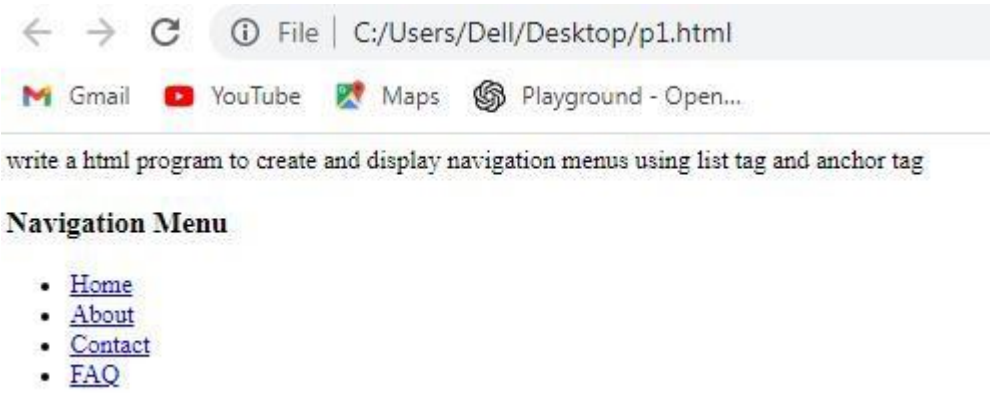
1.write a html program to create and display navigation menus using list tag and anchor tag

```
<!DOCTYPE html>
<html>
<head>
<title>Navigation Menu</title>
</head>
<body>

<h3>Navigation Menu</h3>

<ul>
  <li><a href="home.html">Home</a></li>
  <li><a href="about.html">About</a></li>
  <li><a href="contact.html">Contact</a></li>
  <li><a href="faq.html">FAQ</a></li>
</ul>

</body>
</html>
```

<! --filename: Home.html--->

```
<html>
<h1 align="center">Seshadripuram Degree College</h1>
<h2>courses offered</h2>
<ol>
<li>BCA</LI>
<li>B.Com</LI>
<li>M.com</LI>
</OL>
</html>
```

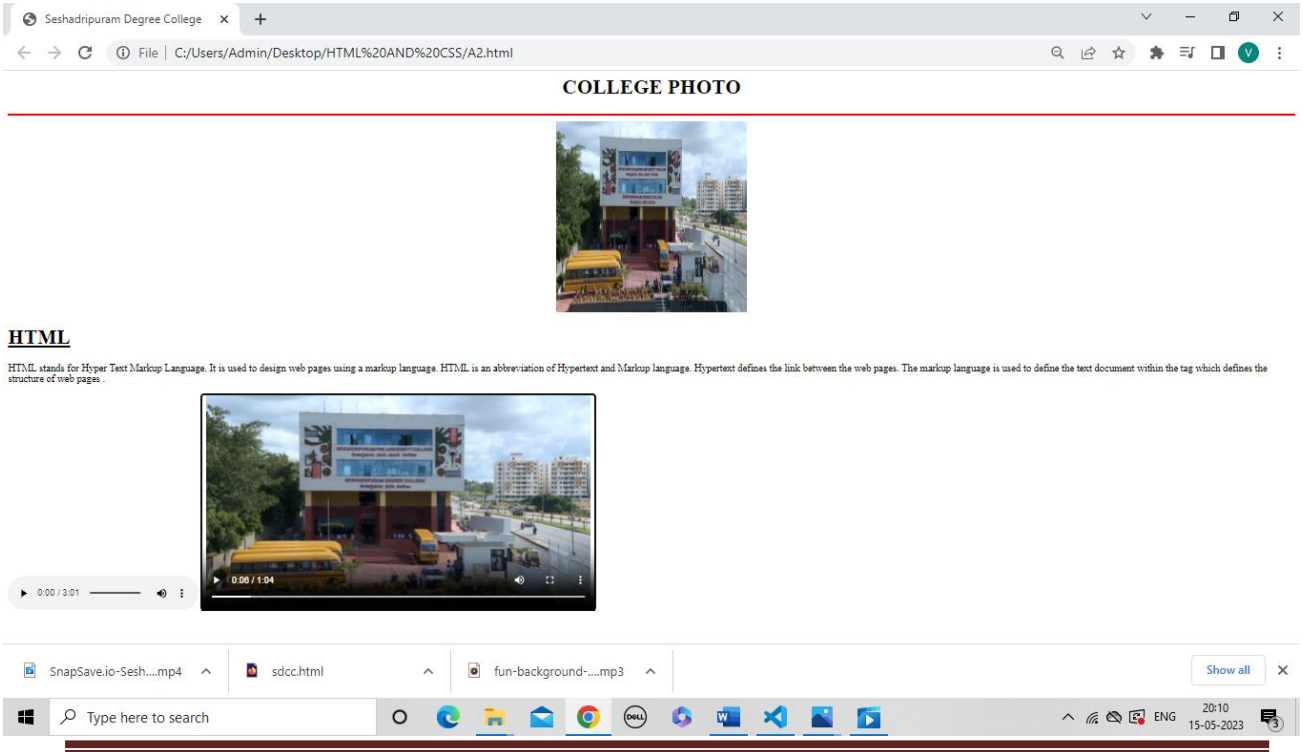
output:



2. Write an HTML program to display Multi-mediadata (text, images, audios, videos, gifs, etc) on a webpage

```
<html>
<head>
<title>Seshadripuram Degree College</title>
</head>
<body>
<h1 align="center"> COLLEGE PHOTO</h1>
<hr color="red" size="3px">
<center><img src="C:\Users\Dell\Desktop\BCA staff.jpeg" ></img></center>
<h1> <u>HTML</u></h1>
<P align="justified">
HTML stands for Hyper Text Markup Language. It is used to design web pages using a markup language.
 HTML is an abbreviation of Hypertext and Markup language. Hypertext defines the link between the web pages.
The markup language is used to define the text document within the tag which defines the structure of web pages
.</P>
<audio controls >
<source src="C:\Users\Dell\Desktop\Kalimba.mp3" type="audio/mpeg">
</audio>
<video width="620px" height="340px" controls autoplay>
<source src="C:\Users\Dell\Desktop\AI EXhibition.mp4"
type="video/mp4">
</video>
</body> </html>
```

OUTPUT:



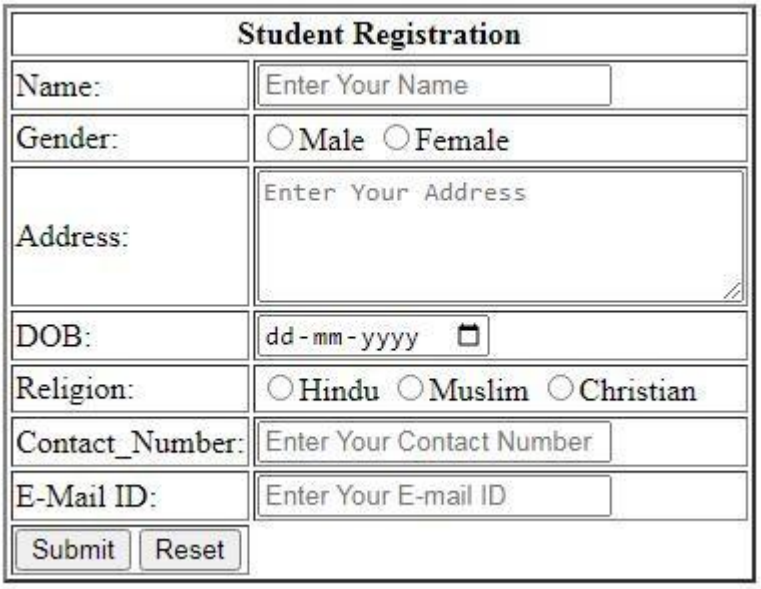
3 .write a HTML program to create student registration form on submitting the form check whether fields are empty or not using Javascript. If any fields are empty display an error message.

```
<!DOCTYPE html>
<html>
 <head>
 <title>Student Registration Form</title>
 <script type="text/javascript">
 function validate()
 {
 if(document.getElementById('Student_Name').value=="")
 {
 alert("Please Enter the Name of the Student ");
 return false;
 }
 else if(document.getElementById('Gender').checked!=true)
 {
 alert("Please Select Gender");
 return false;
 }

 else if(document.getElementById('Address').value=="")
 {
 alert("Please Enter Student Address");
 return false;
 }
 else if(document.getElementById('birthday').value=="")
 {
 alert("Please Enter Student birthday");
 return false;
 }
 else if(document.getElementById('Religion').checked!=true)
 {
 alert("Please Select Any Religion");
 return false;
 }

 else if(document.getElementById('Contact_Number').value=="")
 {
 alert("Please Enter the Contact Number");
 return false;
 }
 else if(document.getElementById('email').value=="")
 {
 alert("Please Enter The Correct E mail id ");
 return false;
 }

 else
```

```
 {
 alert("Form Submitted Successfully");
 return true;
 }
 }
 </script>
 </head>
 <body>
 <form onsubmit="return validate()">
 <table border="2px" align="center">
 <tr>
 <th colspan="2">Student Registration </th>
 </tr>
 <tr>
 <td>Name:
 </td>
<td>
 <input type="text" name="Student_Name" id="Student_Name"
placeholder="Enter Your Name" >
 </td>
 </tr>
 <tr>
 <td>Gender:
 </td>
 <td>
 <input type="radio"name="gender" id="Gender">Male
 <input type="radio"name="gender" id="Gender">Female
 </td>
 </tr>

 <tr>
 <td>Address:
 </td>
 <td>
 <textarea name="Address" rows="4" cols="30" id="Address"
placeholder="Enter Your Address" ></textarea>
 </td>
 </tr>
 <tr>
<td>DOB:
 </td>
 <td>
 <input type="date" id="birthday" name="birthday">
 </td>
 </tr>
 <tr>
 <td>Religion:
 </td>
 <td>
 <input type="radio"name="Religion" id="Religion">Hindu
```

```
 <input type="radio"name="Religion">Muslim
 <input type="radio"name="Religion">Christian
 </td>
 </tr>
<tr>
 <td>Contact_Number:
 </td>
 <td>
 <input type="text" id="Contact_Number" name="Contact_Number"
maxlength="10"placeholder="Enter Your Contact Number">
 </td>
</tr>
<tr>
 <td>E-Mail ID:
 </td>
 <td>
 <input type="text" id="email" name="email" placeholder="Enter Your E-mail ID">
 </td>
</tr>
<td>
 <input type="submit" value="Submit">
 <input type="Reset" value="Reset">
 </td>
</table>
</form>
</body>
</html>
```

OUTPUT:



4.Write an HTML program to create bio-data(CV or Resume) and to change the following CSS properties :
***Font**
***Text**
***Background**

```
<html>
<head>
<title>Resume</title>
      <style>
         body {
            font-size: 16px;
            background-color:powderblue;
            font-family: monospace;
         }
      </style>

</head>
<body>
<h1 align=center>CURRICULUM VITAE</h1>
<hr color=blue size=3px>
<p align=right width="100%">
RAHUL.R<br>
Contact: 6379585830<br>
rahul_r6@yahoo.com<br></p>

<hr color="#0000ff" size=3px>
<p>To utilize the knowledge of computer skills andapplication concepts in a challenging &
growth-oriented manner for the organization and taking everyopportunity to learn more
in the fields of technology and application</p>
<table align=center width=80%>
<tr>
<td align=center bgcolor="red">EDUCATIONAL ATTAINMENT
</td>
</tr>
<table align=center width=80% border=2px>
<tr>
<th>
Degree
</th>
<th>
Name of Institution
</th>
<th>
```

University
</th>
<th>
Year of Passing
</th>
<th>Percentage</th>
</tr>
<tr>
<td>BCA
</td>
<td> Seshadripuram Degree College, Mysore.
</td>
<td>Mysore University
</td>
<td>2008
</td>
<td>68.7%
</td>
</tr>
<tr>
<td>PUC – P.C.M.B
</td>
<td>Vidyashram PU
College,Mysore.
</td>
<td>Department of Pre University Education
</td>
<td>2005
</td>
<td>71%
</td>
</tr>
<tr>
<td>SSLC
</td>
<td>Govt High School,Pandavpur.
</td>
<td>Karnataka Board of Education
</td>
<td>2003
</td>
<td>76%
</td>
</tr>

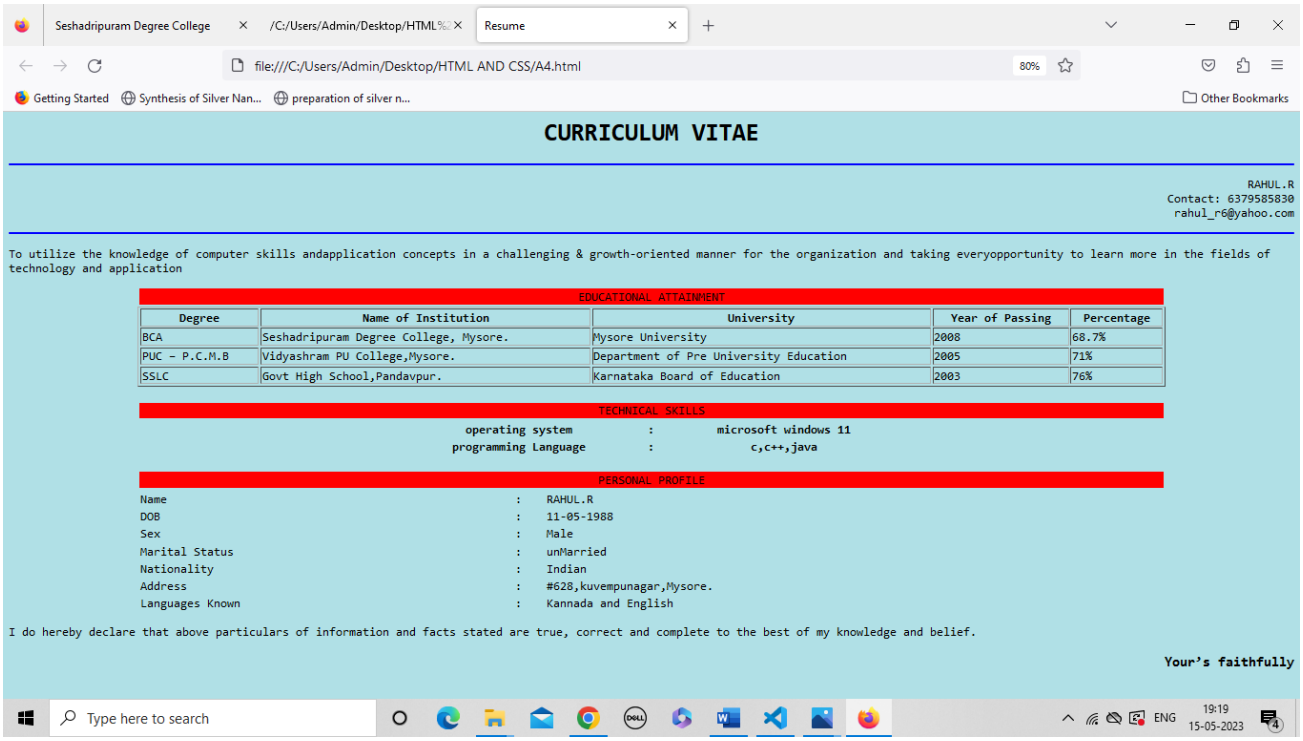
```
</table>
<br>
<table align="center" width="80%">
<tr>
<td align=center bgcolor=red>TECHNICAL SKILLS
</td>
</tr>
</table>
<table align="center" width="40%" >
<tr text-align="left">
<th>operating system
</th>
<th>:
</th>
<th>microsoft windows 11
</th>
<tr>
<th> programming Language
</th>
<th>:
</th>
<th>c,c++,java
</th></tr>
</tr>
</table>
<br>
<table align="center" width="80%">
<tr>
<td align=center bgcolor=red>PERSONAL PROFILE
</td>
</tr>
</table>
<table align="center" width="80%" >
<tr text-align="left">
<td>Name
</td>
<td>:
</td>
<td>RAHUL.R
</td>
</tr>
<tr>
<td>DOB

</td>
```

<td>:
</td>
<td>11-05-1988
</td>
</tr>
<tr>
<td>Sex
</td>
<td>:
</td>
<td>Male
</td>
</tr>
<tr>
<td>Marital Status
</td>
<td>:
</td>
<td>unMarried
</td>
</tr>
<tr>
<td>Nationality
</td>
<td>:
</td>
<td>Indian
</td>
</tr>
<tr>
<td>Address
</td>
<td>:
</td>
<td>#628,kuvempunagar,Mysore.
</td>
</tr>
<tr>
<td>Languages Known
</td>
<td>:
</td>
<td>Kannada and English

</td>

```
</tr>
</table>
<p>
I do hereby declare that above particulars of information and
facts stated are
true, correct and complete to the best of my knowledge and
belief.
</p>

<h3 align=right>Your's faithfully</h3>
</body>
</html>
```

OUTPUT:



5. Write anHTML program to create div and apply the following CSS properties om created div

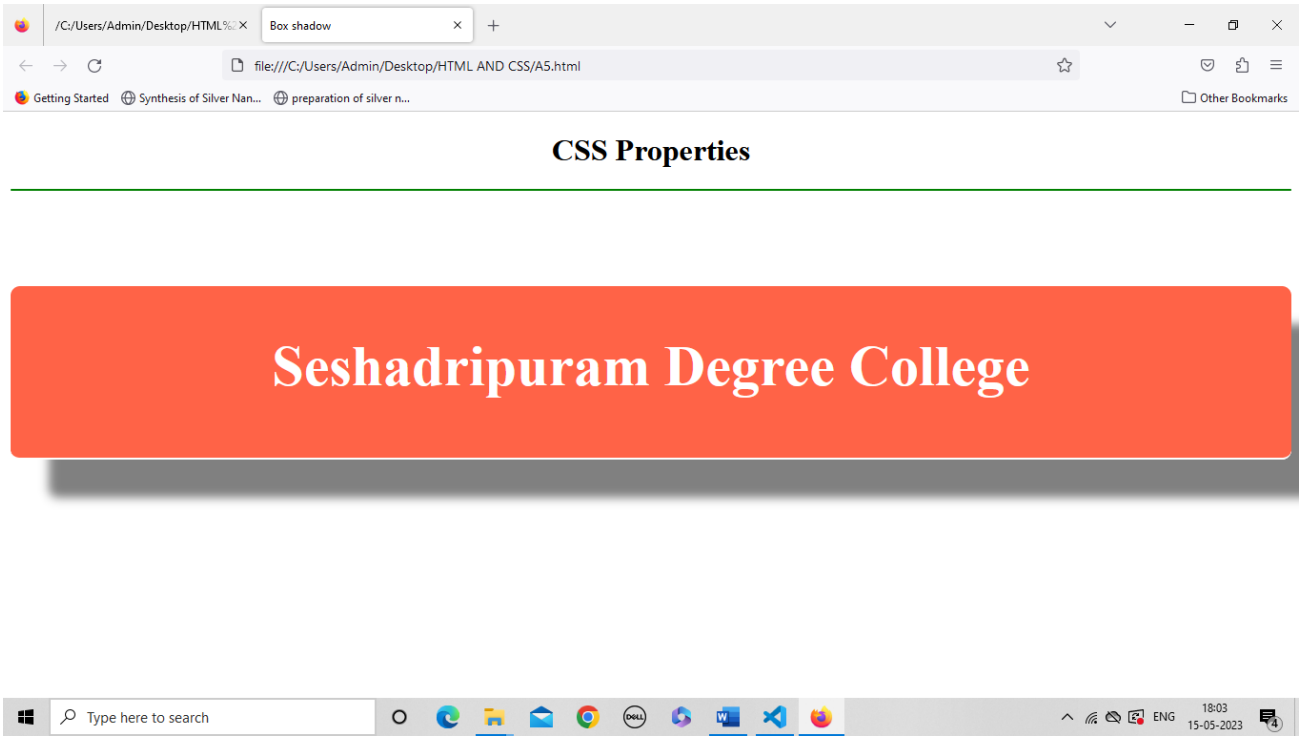
***Margin**
***Padding**
***Border**
***Box shadow**

```
<html>
 <head>
 <title>Box shadow</title>
 <style>
 #demo
 {
```

```
border-radius: 10px;
background-color: tomato;
border-bottom: 2px solid white;
width: 80%px;
height: 80px;
color: white;
font-weight: bold;
```

```
font-size: 60px;
margin-top:100px;
padding:50px;
box-shadow:40px 40px 10px grey;
}
</style>
</head>
<body>
<center>
<h1 > CSS Properties</h1>
</center>
<hr color=green>
<center>
<div id="demo">Seshadripuram Degree College</div>
</center>

</body>
</html>
```

OUTPUT:

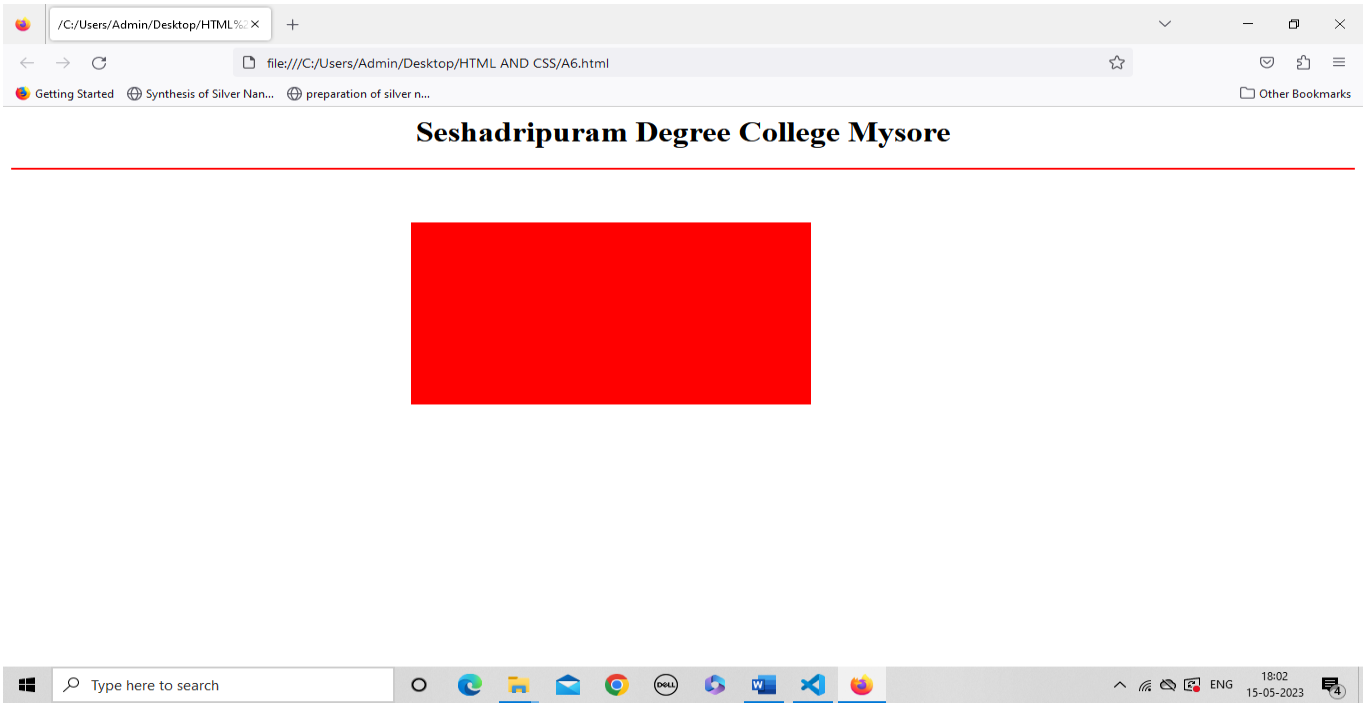


6. Write an HTML program to create a box and using CSS transform and transition properties move the box to the center of web page on loading web page.

```
<html>
<head>
<script type="text/javascript">
function move()
{
document.getElementById('demo').style.transform="translate(400px,50px)";
```

```
document.getElementById('demo').style.width="400px";
document.getElementById('demo').style.height="200px";
}
</script>
<style>
div {
width: 100px;
height: 100px;
background: red;
transition: width 2s, height 2s, transform 2s;
}
</style>
</head>
<body onload="move()">
<h1 align="center">Seshadripuram Degree College Mysore</h1>
<hr color="red" size="3px">
<div id="demo"></div>
</body>
</html>
```

OUTPUT:



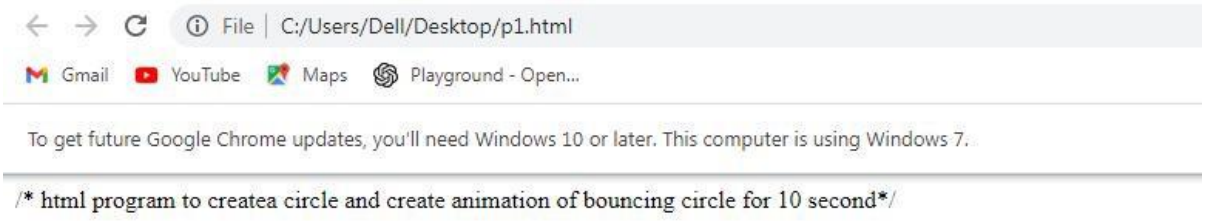
7. Write an HTML program to create a circle and create an animation of bouncing of the circle for 10 sec.

```
<!DOCTYPE html>
<html>
<head>
<style>
#circle {
        height: 100px;
        width: 100px;
```

```
        background-color: green;
        border-radius: 50%;
        position: relative;
        animation: mymove 10s infinite;
}
```

```
@keyframes mymove {
        from {top: 0px;}
        to {top: 200px;}
}
</style>
</head>
<body>
<div id = "circle"></div>
</body>
</html>
```

OUTPUT:

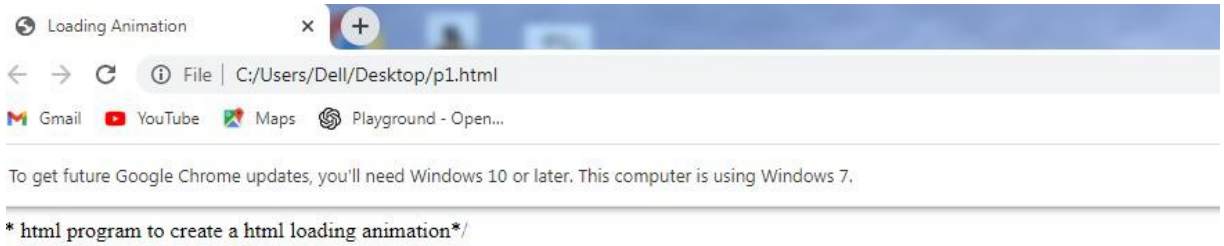


8 . Write an HTML program to create page loading animations.

```
<!DOCTYPE html>
<html>
<head>
   <title>Loading Animation</title>
   <style type="text/css">
    #loader {
        border: 16px solid #f3f3f3;
        border-top: 16px solid #3498db;
        border-radius: 50%;
        width: 120px;
        height: 120px;
        animation: spin 2s linear infinite;
        position: absolute;
```

```
            top: 50%;
            left: 50%;
            margin-top: -60px;
            margin-left: -60px;
        }

        @keyframes spin {
            0% { transform: rotate(0deg); }
            100% { transform: rotate(360deg); }
        }
    </style>
</head>
<body>
    <div id="loader"></div>
</body>
</html>
```

OUTPUT:

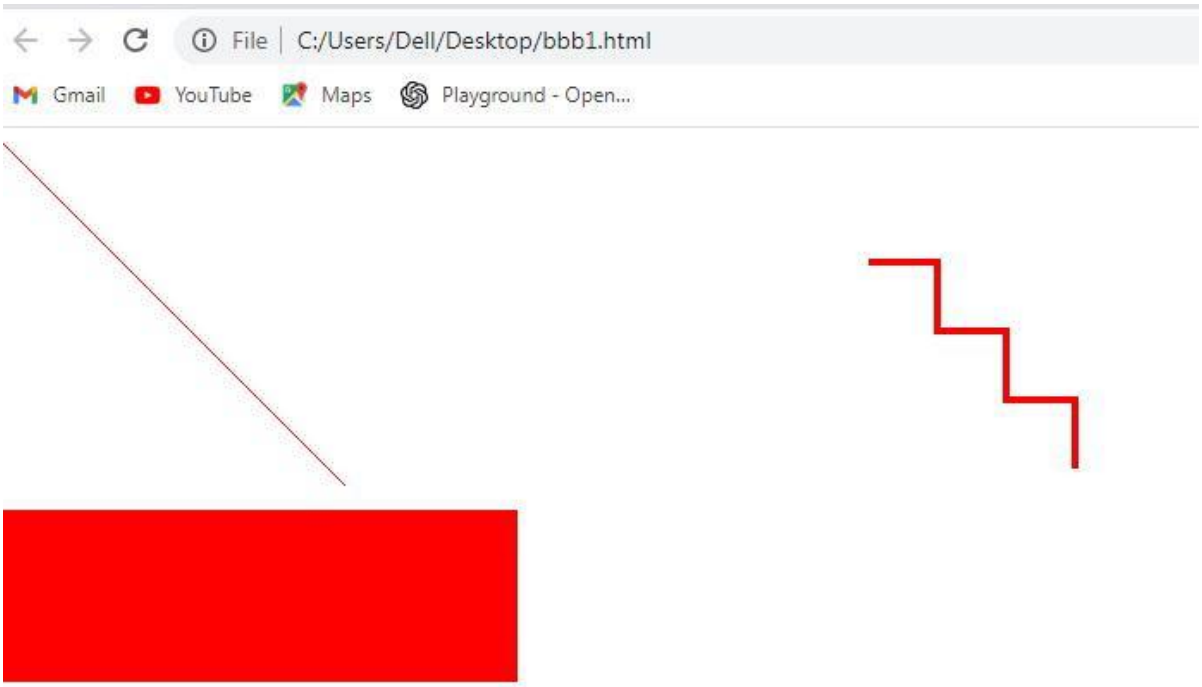


PART B

1. Write an HTML program to draw line, polyline and rectangle and fill rectangle with red color using svg tag

```
<html>
 <body>
 <svg height="210" width="500">
 <line x1="0" y1="0" x2="200" y2="200" style="stroke:rgb(255,0,0);strokewidth:2" />
 Sorry, your browser does not support inline SVG.
 </svg>
  <svg height="180" width="500">
 <polyline points="0,40 40,40 40,80 80,80 80,120 120,120 120,160"
style="fill:white;stroke:red;stroke-width:4" />
 Sorry, your browser does not support inline SVG.
 </svg>
 <svg width="400" height="110">
 <rect width="300" height="100" style="fill:rgb(255,0,0);stroke-width:3;" />
 Sorry, your browser does not support inline SVG.
 </svg>
 </body>
</html>
```

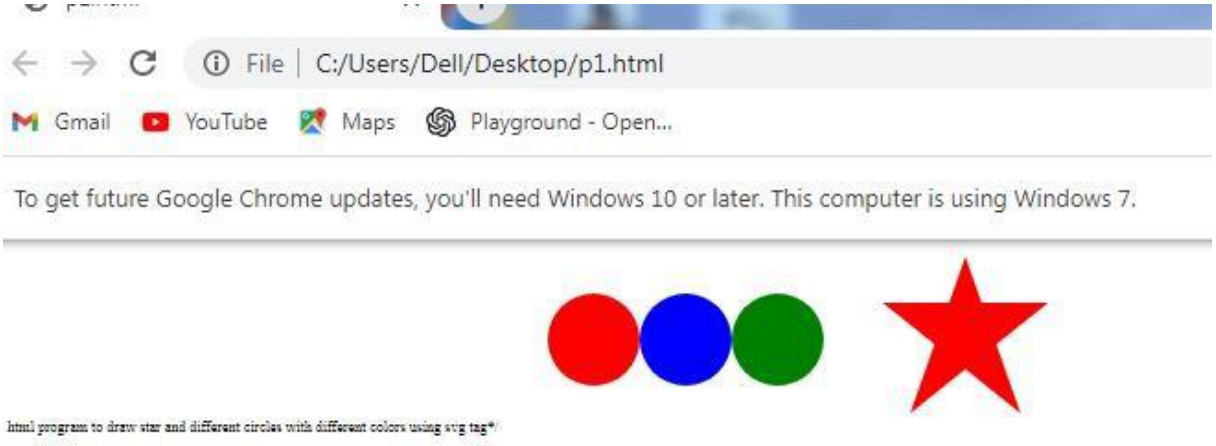
OUTPUT:



2. Write an HTML program to draw star and multiple circle and with different color using svg tag

```
<html>
<body>

<svg width="400" height="200">
  <circle cx="100" cy="100" r="50" fill="red" />
  <circle cx="200" cy="100" r="50" fill="blue" />
  <circle cx="300" cy="100" r="50" fill="green" />
</svg>
<svg id = "svgelem" height = "200" xmlns = "http://www.w3.org/2000/svg">
  <polygon points = "100,10 40,180 190,60 10,60 160,180" fill = "red"/>
  </svg>
</body>
</html>
```

OUTPUT:

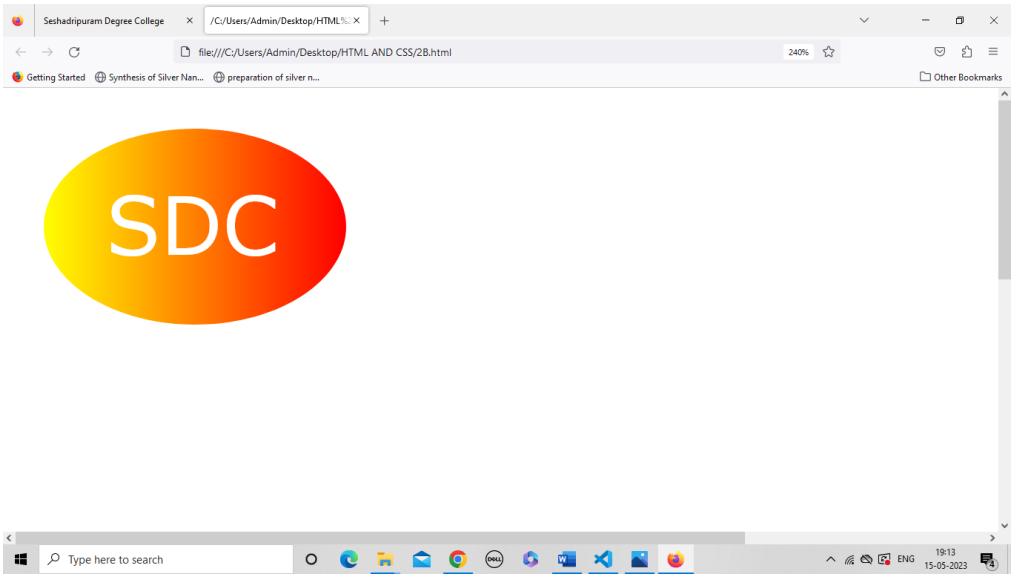


/2B.Write an HTML program to create logo with linear gradient properties using svg tag./

```
<html>
 <body>
 <svg height="500" width="700">
 <defs>
 <linearGradient id="grad1" x1="0%" y1="0%" x2="100%" y2="0%">
 <stop offset="0%"
 style="stop-color:rgb(255,255,0);stop-opacity:1" />
 <stop offset="100%"
 style="stop-color:rgb(255,0,0);stop-opacity:1" />
 </linearGradient>
 </defs>
 <ellipse cx="100" cy="70" rx="85" ry="55" fill="url(#grad1)" />
 <text fill="#ffffff" font-size="45" font-family="Verdana"
 x="50" y="86">SDC </text>
</svg>
</body>
```

</html>

OUTPUT:



3.Write an HTML program to draw square and rectangle using canvas tag and javascript

//Rectangle//

```
<html>
<body>
<h1>Rectangle</h1>
<canvas id="myCanvas">Your browser does not support the canvas
tag.</canvas>
<script>
var c = document.getElementById("myCanvas");
var ctx = c.getContext("2d");
ctx.fillStyle = "#FF0000";
ctx.fillRect(0, 0, 180, 80);
</script>
</body>
</html>
```

OUTPUT:

Rectangle

Rectangle

// Square//

```
<html>
<body>
<h1>The Square canvas element</h1>
<canvas id="myCanvas" onmouseover="c()">Your browser does not
support the canvas tag.</canvas>
<script>
var c = document.getElementById("myCanvas");
var ctx = c.getContext("2d");
ctx.fillStyle ="#FF3456";
ctx.fillRect(0, 0, 80, 80);
</script>
</body>
</html>
```

Output:

Square

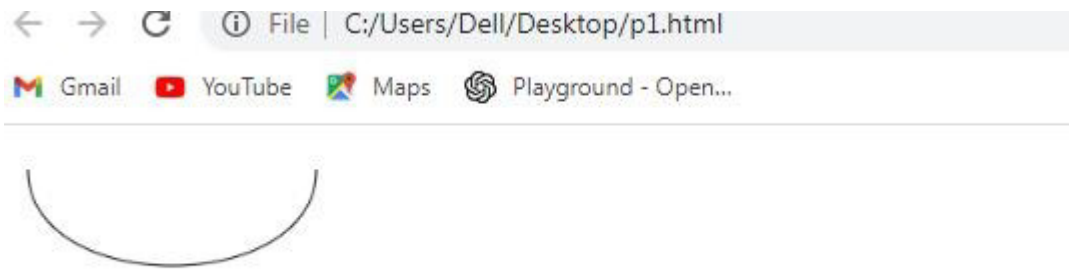
The Square canvas element

4. Write an HTML program to draw bezier curve using canvas tag and JavaScript

```
<!DOCTYPE html>
<html>

<head>
   <script type="text/javascript">
      function draw() {
         var canvas = document.getElementById('canvas');
```

```
        if (canvas.getContext) {
            var ctx = canvas.getContext('2d');
        }
        ctx.beginPath();
        ctx.moveTo(20, 20);
        ctx.bezierCurveTo(20, 100, 200, 100, 200, 20);
        ctx.stroke();
    }
  </script>
</head>

<body onload="draw();">
  <canvas id="canvas" width="220" height="220"></canvas>
</body>

</html>
```

OUTPUT:

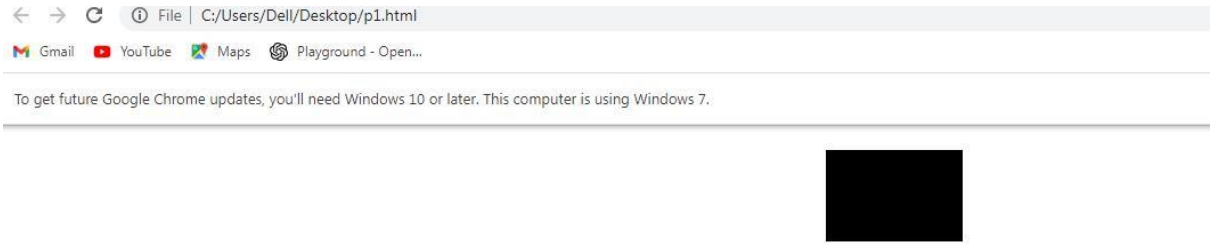


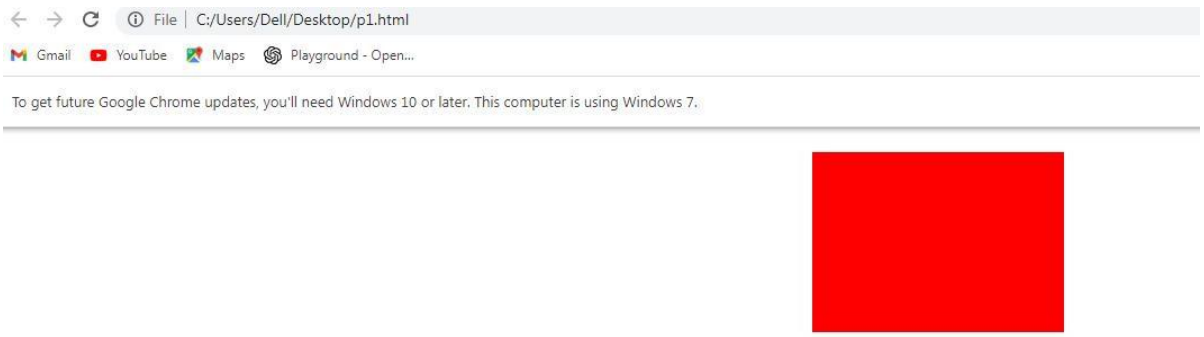
6.html program to draw rectangle using canvas and change background to red and change scale of rectangle to 2 on hover on rectangle

```
<!DOCTYPE html>
<html>
<head>
<script>
function drawRectangle()
{
  var c = document.getElementById("myCanvas");
  var ctx = c.getContext("2d");
  ctx.fillStyle = "black";
  ctx.fillRect(20,20,150,100);
  c.addEventListener('mouseover',onMouseOver);
}

function onMouseOver(){
  var c = document.getElementById("myCanvas");
```

```
    var ctx = c.getContext("2d");
    ctx.fillStyle = "red";
    ctx.fillRect(20,20,300,200);
}
</script>
</head>
<body onload="drawRectangle()">
<canvas id="myCanvas" width="300" height="300">

</canvas>

</body>
</html>
```

OUTPUT:





7. Write an html program to draw a circle using canvas and to apply the rotations animations on loading the page

```
<!DOCTYPE html>
<html lang="en" xmlns="http://www.w3.org/1999/xhtml">
<head>
   <meta content="text/html; charset=ISO-8859-1"
      http-equiv="content-type">
   <script type="application/javascript">
      var centreX = 100; var centreY = 100;
      var radius = 75;
      var rotateAngle = 36 * Math.PI / 180;
      var startAngle = 0 * Math.PI / 180;
      var endAngle = 36 * Math.PI / 180;
      var counter = 0;
      var animFlag;
      var colours = ["teal", "red", "green", "blue", "yellow", "violet", "orange", "grey", "navy
blue", "purple"];

      function init() {
         var canvas = document.getElementById("canvas");
         if (canvas.getContext) {
            var ctx = canvas.getContext("2d");
            ctx.lineWidth = 3.0;
            ctx.fillStyle = "orange";
            ctx.fillRect(200, 100, 75, 20);
            ctx.fillStyle = "black";
            ctx.font = "15px verdana";
            ctx.fillText("Rotate", 215, 114);
            drawWheel();
         }
      }

      function drawWheel() {
         var canvas = document.getElementById("canvas");
         if (canvas.getContext) {
            var ctx = canvas.getContext("2d");
            for (i = 0; i < 10; i++) {
               ctx.fillStyle = colours[i];
               ctx.translate(centreX, centreY);
               ctx.rotate(rotateAngle);
               ctx.translate(-centreX, -centreY);
               ctx.beginPath();
               ctx.moveTo(centreX, centreY);
               ctx.lineTo(centreX + radius, centreY);
               ctx.arc(centreX, centreY, radius, startAngle, endAngle, false);
               ctx.closePath();
               ctx.fill();
            }
         }
      }

      function rotateWheel(rnd) {
```

```
        var canvas = document.getElementById("canvas");
        if (canvas.getContext) {
            var ctx = canvas.getContext("2d");
            ctx.translate(centreX, centreY);
            ctx.rotate(rotateAngle);
            ctx.translate(-centreX, -centreY);
            drawWheel();
            counter++;
            if (counter > rnd) {
                counter = 0;
                clearInterval(animFlag);
            }
        }
    }

    function mouseClick() {
        var rnd = Math.ceil(Math.random() * 100);
            animFlag = setInterval(function () { rotateWheel(rnd) }, 25);
    }
    window.addEventListener("load", mouseClick, false);

  </script>
  <title>Animation - Moving Banner</title>
</head>
<body onload="init();">
  <canvas id="canvas" width="600" height="500"></canvas>
  <br>
</body>
</html>
```