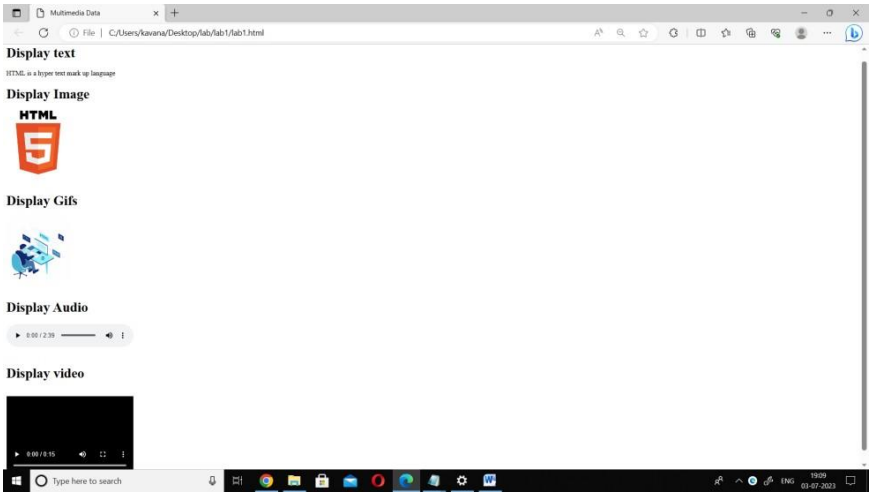
Computer Multimedia and Animation lab

Part-A

1.write a HTML program to display Multi-media data (text, image,audio, video, gif, etc) on a webpage.

```
<!DOCTYPE html>
<html>
<head>
    <title>Multimedia Data</title>
</head>
<body>
  <h1>Display text</h1>
  <p> HTML is a hyper text mark up language</p>
  <h1> Display Image</h1>
        <img src="2.jpg" alt="not found" width="250"
height="250"><br><br>
  <h1> Display Gifs</h1>
        <img src="cmp.gif" alt="not found" width="250"
height="250"><br><br>
  <h1> Display Audio </h1>
         <audio controls >
           <source src="audio.mp3" type="audio/mp3">
         </audio><br><br>
  <h1> Display video </h1>
        <video controls height="200" width="300">
          <source src="video.mp4" type="video/mp4">
        </video>
 </body>
</html>
```

Output:



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2. Write a HTML program to create and display navigations using list tags and anchor tag

Lab2.html

```
<html>
 <head>
  <style>
   nav{ background-color:pink;}
  </style>
 </head>
 <body>
  <h1 align="center"style="background-color:blue;
     color:yellow;">Demonstrating HTML Lists and Anchor tag</h1>
   <nav>
     <ol>
       <li><a href="home.html">HOME</a></li><br>
       <li><a href="contact.html">CONTACT</a></li>
      </ol>
    </nav>
  </body>
</html>
```

home.html

```
<html>
<body>
  <h1> HOME PAGE</h1>
</body>
</html>
```

contact.html

```
<html>
<body>
  <h1> CONTACT PAGE</h1>
</body>
</html>
```

Output:

.

Home Page:

Contact Page:

3. Write a HTML program to create class time table.

```
<html>
<head>
<style>
  tabel,tr,td,th{border:1px solid black;
                 text-align:center;}
</style>
</head>
<body>
<h1><pre>     Department of BCA</pre></h1>

<table border="1">
<caption> 4th Sem class Time Table</caption>
<tr>
  <th> Day/Time</th>
  <th> 8:30-9:30</th>
  <th> 9:30-9:40</th>
  <th> 9:40-10:30</th>
  <th> 10:30-11:30</th>
</tr>
<tr>
  <td>Monday</td>
  <td>OS</td>
  <td rowspan="6">Break</td>
  <td >MM</td>
  <td>Python</td>
</tr>
<tr>
  <td>Tuesday</td>
  <td>Python</td>
  <td>OS</td>
  <td>MM</td>
```

.

```
</tr>
<tr>
  <td>Wednsday</td>
  <td >OS</td>
  <td>MM</td>
  <td>Python</td>
</tr>
<tr>
  <td>Thursday</td>
  <td>MM</td>
  <td>Python</td>
  <td>OS</td>
</tr>
<tr align="center">
  <td>Friday</td>
  <td>Kan</td>
  <td>MM</td>
  <td>OS</td>
</tr>
<tr>
  <td>Saturday</td>
  <td>Eng</td>
  <td>ED</td>
  <td>Python</td>
</tr>
</table>
</body>
</html>
```

Output:

Department of BCA

4th Sem class Time Table

Day/Time	8:30-9:30	9:30-9:40	9:40-10:30	10:30-11:30
Monday	OS	Break	MM	Python
Tuesday	Python		OS	MM
Wednsday	OS		MM	Python
Thursday	MM		Python	OS
Friday	Kan		MM	OS
Saturday	Eng		ED	Python

.

4. Write an HTML code to create a frameset having header, navigation and content section.

Lab4.html

```
<HTML>
<frameset rows="30%,70%">
  <frame src="header.html">

  <frameset cols="20%,*">
    <frame src="menu.html" name="menu">
    <frame src="main.html" name="main">
  </frameset>

</frameset>
</html>
```

header.html

```
<html>
<head>
<style>
 header{text-align:center; color:purple;font-size:35;}
</style>
</head>
<body>
 <header>
   <h4>VIDYAVAHINI GROUP OF INSTITUTIONS</h4>
   <h1>VIDYAVAHINI FIRST GRADE COLLEGE</h1>
 </header>
</body>
</html>
```

menu.html

```
<html>
<body align="center">
<font size="6">
<br>
  <a href="main.html" target="main"> HOME </a><br><br><br>
  <a href="about.html" target="main"> ABOUT US</a><br><br><br>
</font>
</body>
</html>
```

main.html

```
<html>
<body bgcolor="black" align="center">
<font size="9" color="white">
<h1> HOME</h1>
<p>VIDYAVAHINI FIRST GRADE COLLEGE</p>
```

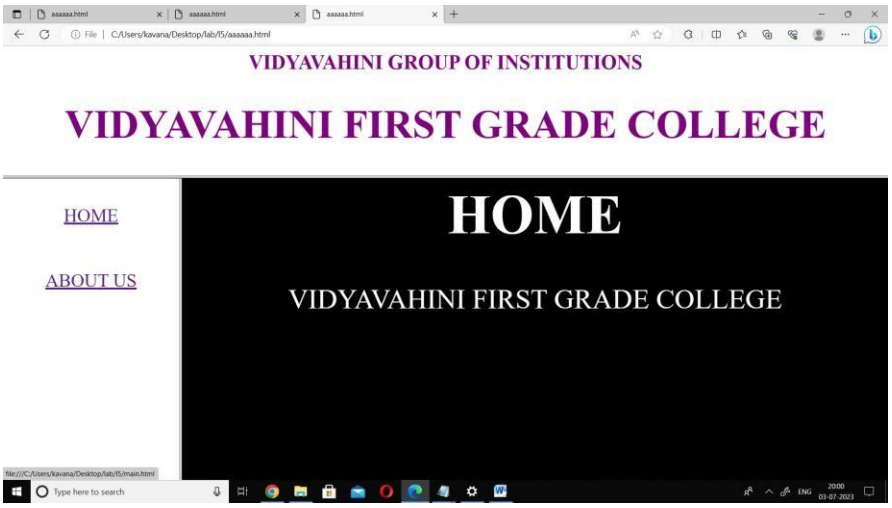
.

```
</font>
</body>
</html>
```

about.html

```
<html>
<body bgcolor="black" align="center">
<font size="9" color="white">
<h1> ABOUT US</h1>
<p>Our College provides a supportive learning environment in which students can achive their personal,educational and career goals.</p>
</font>
</body>
</html>
```

Output:



5. Write a HTML program to create student registration form on submitting the from check whether fields are empty or not using java script. If any fields are empty, display an error message.

```
<html>
<head>
<title>Student Registration Form</title>
<script>
function validateForm()
 {
var firstName = document.forms["registrationForm"]["firstName"].value;
var lastName = document.forms["registrationForm"]["lastName"].value;
var email = document.forms["registrationForm"]["email"].value;
var dob = document.forms["registrationForm"]["dob"].value;
```

.

```
if (firstName == "" || lastName == "" || email == "" || dob == "")
 {
   alert("Please fill in all fields!");
  }
}
</script>
</head>
<body>
<h1>Student Registration Form</h1>
<form name="registrationForm" onsubmit="validateForm()">
   <label>First Name:</label>
     <input type="text" name="firstName"><br><br>
  <label>Last Name:</label>
     <input type="text" name="lastName"><br><br>
  <label>Email:</label>
     <input type="email" name="email"><br><br>
<label>Date of Birth:</label>
     <input type="date" name="dob"><br><br>
     <input type="submit" value="Submit">
</form>
</body>
</html>
```

Output:

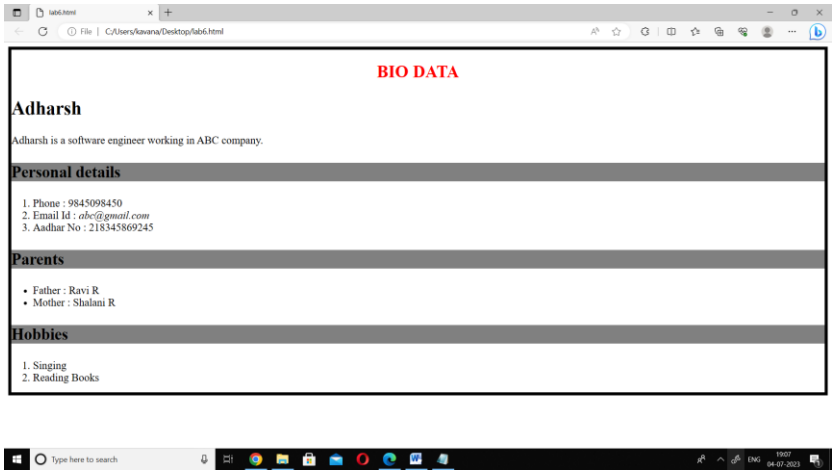
6. Write an HTML program to create bio-data and to change the following css properties. *Font *Text *Background.

```
<!DOCTYPE html>
<html>
<head>
 <style>
   div{
       border:6px solid black;
       width:350;
      }
    h3{background-color:grey; font-size:30px;}
    p{font-size:20px;}
    h1{color:red;}
    h2{font-size:35px;}
```

.

```
   li{font-size:20px;}
 </style>
</head>

<body>
 <div>
   <h1 align="center">BIO DATA</h1>

   <h2>Adharsh</h2>
   <p>Adharsh is a software engineer working in ABC company.</p>

 <h3>Personal details</h3>
     <ol>
       <li>Phone : 9845098450</li>
       <li>Email Id : <i>abc@gmail.com</i></li>
       <li>Aadhar No : 218345869245</li>
     </ol>

 <h3>Parents</h3>
     <ul>
       <li>Father : Ravi R </li>
       <li>Mother : Shalani R</li>
     </ul>

 <h3>Hobbies</h3>
     <ol>
       <li>Singing</li>
       <li>Reading Books</li>
     </ol>
</div>
</body>
</html>
```

Output:

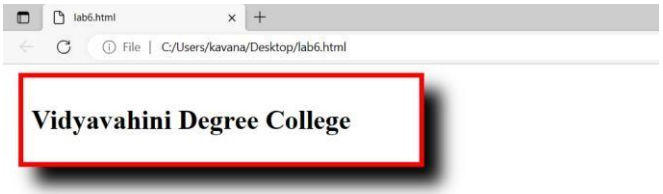


.

7. Write an HTML program to create div and apply the following css. *Margin *Padding *Border *Box Shadow.

```
<html>
<head>
 <style>
   div{border:6px solid red;
       padding:10px;
       width:450;
       margin:10px;
       box-shadow:20px 20px 20px  black;
      }
  </style>
</head>
<body>
 <div>
   <h1> Vidyavahini Degree College</h1>
 </div>
</body>
</html>
```

Output:



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

```
<!DOCTYPE html>
<html>
<head>
    <title>CMA-Program-8</title>
<style>

.box {
        height: 200px;
        width: 200px;
        border: 3px solid;
        background-color:pink;
        transition-property: transform;
        transition-duration: 5s;

.
```

```
      }
.move {
          transform: translateX(315%) translateY(115%);
        }
  </style>
</head>
<body>
   <div class="box"></div>
   <script>
       setTimeout(() => {
       document.querySelector('div').classList.add('move');
       }, 1000);
    </script>
</body>
</html>
```

Output:

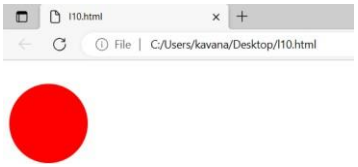
9. Write an HTML program to create a circle and create an animation of bouncing of the circle for 10 sec.

```
<html>
<head>
<style>
    .circle {
              width: 100px;
              height: 100px;
              border-radius: 50%;
              background-color: red;
              position: relative;
              animation-name: bounce;
              animation-duration: 10s;
              animation-iteration-count: infinite;
            }
```

.

```
@keyframes bounce {
                              0% { top: 0; }
                              50% { top: 350px; }
                              100% { top: 0; }
                            }
</style>
</head>
<body>
      <div class="circle"></div>
</body>
</html>
```

Output:

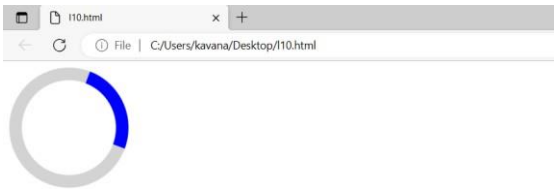


10. Write an HTML program to create page loading animations

```
<html>
<head>
<style>

@keyframes spin {
    to{ transform: rotate(360deg); }
  }

.load {
       width: 120px;
       height: 120px;
       border: 16px solid lightgrey;
       border-top: 16px solid blue;
       border-radius: 50%;
       animation-name: spin;
       animation-duration: 2s;
       animation-timing-function: linear;
       animation-iteration-count: infinite;
      }
</style>
</head>
<body>
  <div class="load"></div>
</body>
</html>
```

.

Output:



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Computer Multimedia and Animation lab

Part-B

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

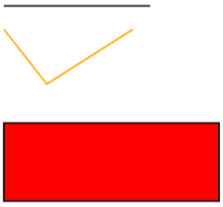
```
<!DOCTYPE html>
<html>
<head>
<title>SVG </title>
</head>
<body>
<svg width="400" height="400">

    <line x1="50" y1="50" x2="220" y2="50" stroke="black" stroke-width="2" />

    <polyline points="50,80 100,150 200,80" stroke="orange" fill="none" stroke-
    width="2" />

    <rect x="50" y="200" width="250" height="100" stroke="black" stroke-width="2"
    fill="red"/>
</svg>
</body>
</html>
```

Output:



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

```
<!DOCTYPE html>
<html>
<head>
<title>SVG</title>
</head>
<body>
<svg width="400" height="400">

    <polygon points="200,50 225,150 325,150 250,200 275,300 200,250 125,300
    150,200 75,150 175,150" stroke="black" fill="red" />

    <circle cx="50" cy="250" r="50" fill="purple" />
    <circle cx="300" cy="100" r="50" fill="green" />
    <circle cx="350" cy="250" r="50" fill="orange" />
</svg>
</body>
</html>
```

Output:

3. Write an HTML program to create logo with linear gradient properties using SVG tag.

```
<!DOCTYPE html>
<html>
<head>
<title>SVG </title>
</head>
<body>
<svg height="250" width="250">
  <defs>
    <linearGradient id="grad1" x1="0%" y1="0%" x2="100%" y2="100%">
```

```
      <stop offset="0%" stop-color="yellow" />
      <stop offset="100%" stop-color="green"/>
    </linearGradient>
  </defs>
  <rect x="50" y="50" width="300" height="300" fill="url(#grad1)" />
  <text x="115" y="150">LOGO</text>
</svg>
</body>
</html>
```

Output:

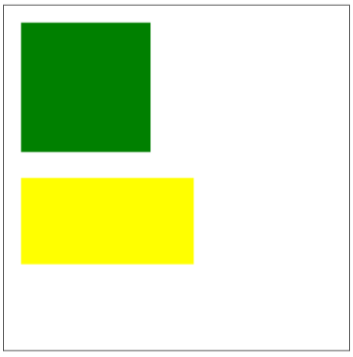
4.Write an HTML program to draw Square and Rectangle using canvas tag and JavaScript.

```
<!DOCTYPE html>
<html>
<body>
    <canvas id="myCanvas" width="400" height="400" style="border: 1px solid
       black;"></canvas>
    <script>
        var canvas = document.getElementById("myCanvas");
        var ctx = canvas.getContext("2d");

        ctx.fillStyle = "green";
        ctx.fillRect(20, 20, 150, 150);

        ctx.fillStyle = "yellow";
        ctx.fillRect(20, 200, 200,100);
    </script>
</body>
</html>
```

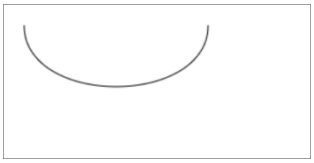
Output:



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

```
<!DOCTYPE html>
<html>
<body>
      <canvas id="myCanvas" width="300" height="150" style="border:1px solid
        grey"></canvas>
        <script>
            const c = document.getElementById("myCanvas");
            const ctx = c.getContext("2d");
            ctx.beginPath();
            ctx.moveTo(20, 20);
            ctx.bezierCurveTo(20, 100, 200, 100, 200, 20);
            ctx.stroke();
        </script>
</body>
</html>
```

Output:



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

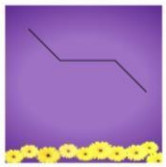
```
<html>
   <body onload = "drawShape();">
         <canvas id = "mycanvas" width="500" height="400"></canvas>
   <script>
      function drawShape()
        {
          var canvas = document.getElementById('mycanvas');
          var ctx = canvas.getContext('2d');

          var img = new Image();
          img.src = 'canvas.jpg';
          img.onload = function()
           {
             ctx.drawImage(img,10,10,200,200);
             ctx.moveTo(40,40);
             ctx.lineTo(80,80);
             ctx.lineTo(150,80);
```

```
            ctx.lineTo(190,120);
            ctx.stroke();
          }
        }

    </script>
  </body>
  </html>
```

Output:



7. 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.

```
<!DOCTYPE html>
<html>
<body>
  <canvas id="myCanvas" width="200" height="100" style="border: 1px solid
    black;"></canvas>
  <script>

    var canvas = document.getElementById("myCanvas");
    var ctx = canvas.getContext("2d");

    function drawRectangle(color, scale)
    {
      ctx.fillStyle = color;
      ctx.fillRect(0, 0,200,100);
    }

    drawRectangle("blue", 1);

    canvas.addEventListener("mouseover",function()
    {
      drawRectangle("red", 2);
     });
    canvas.addEventListener("mouseout",function()
    {
```

```
      drawRectangle("blue", 1);
    });
  </script>
</body>
</html>
```

Output:

Mouse over