

COMPUTER MULTIMEDIA & ANIMATION

IV SEM BCA



Part A:

- 1. Write a HTML/5 program to demonstrate the use of Font family, font variant, font style, and font size.
- 2. Write a HTML/5 program to display random contents using list properties:
 - a. Ordered list b) Unordered list
- 3. Write a HTML/5 program to create gradient using CSS.
- 4. Write a HTML/5 code to demonstrate following CSS animation properties:
 - a. Delay b) Direction c) Duration
- 5. Write a HTML/5 program to demonstrate key frames
- 6. Write a HTML/5 code to demonstrate CSS transition and transformation.
- 7. Write a HTML/5 program to turn on/off a light bulb using JavaScript. Make use of .gif image and buttons.

Part B:

- 1. Write a HTML/5 program to draw rectangle, line, polygon, polyline using SVG.
- 2. Write a HTML/5 program to draw linear and radial gradient ellipse using SVG.
- 3. Write a HTML/5 program to draw a star using SVG.
- 4. Write a HTML/5 program to draw line, circle, rectangle, gradient, text using canvas.
- 5. Write a HTML/5 program to demonstrate translation, rotation, scaling, and transform using canvas.
- 6. Write a HTML/5 program to demonstrate Bezier Curves and Quadratic Curves.
- 7. Write a HTML/5 program to create canvas and add a red square onto the game area with up/down/left/right controller buttons.
- 8. Write a HTML/5 canvas program to add random size obstacles with red square controller button.



1. Write a HTML/5 program to demonstrate the use of Font family, font variant, font style, and font size.

```
<!DOCTYPE html>
<html>
<head>
 <title>Font Styles</title>
 <style>
   .text {
     font-family: Arial, sans-serif;
     font-variant: small-caps;
     font-style: italic;
     font-size: 20px;
   }
 </style>
</head>
<body>
 <h1>Font Styles Demo</h1>
 This is a sample paragraph demonstrating different font styles and sizes.
 This is a paragraph with the default font.
 This paragraph uses a different font family.
 This paragraph has normal font variant.
 This paragraph has normal font style.
 This paragraph has a larger font size.
</body>
</html>
```

b) Unordered list



2. Write a HTML/5 program to display random contents using list properties:

a. Ordered list

```
<!DOCTYPE html>
<html>
<head>
 <title>Random Content Lists</title>
</head>
<body>
 <h1>Ordered List</h1>
 Apple
   Orange
   Banana
   Grapes
   Pineapple
 <h1>Unordered List</h1>
 <ul>
   Red
   Green
   Blue
   Yellow
   Orange
 </body>
```

</html>





4. Write a HTML/5 code to demonstrate following CSS animation properties:

a. Delay b) Direction c) Duration

```
<!DOCTYPE html>
<html>
<head>
  <title>CSS Animation Properties</title>
  <style>
    .box {
       width: 100px;
      height: 100px;
       background-color: blue;
       position: relative;
       animation-name: move;
       animation-duration: 3s;
       animation-delay: 1s;
       animation-direction: alternate;
       animation-iteration-count: infinite;
    }
    @keyframes move {
       0% {
         left: 0;
       }
       100% {
         left: 200px;
       }
  </style>
</head>
<body>
  <h1>CSS Animation Properties Demo</h1>
  <div class="box"></div>
</body>
</html>
```



5. Write a HTML/5 program to demonstrate key frames

```
<!DOCTYPE html>
<html>
<head>
  <title>Keyframes Example</title>
  <style>
    .box {
      width: 100px;
      height: 100px;
       background-color: blue;
       position: relative;
       animation-name: move;
       animation-duration: 3s;
       animation-iteration-count: infinite;
    @keyframes move {
      0% {
         left: 0;
         background-color: blue;
       }
       50% {
         left: 200px;
         background-color: red;
         transform: rotate(180deg);
       100% {
         left: 0;
         background-color: blue;
       }
  </style>
</head>
<body>
  <h1>Keyframes Example</h1>
  <div class="box"></div>
</body>
</html>
```



6. Write a HTML/5 code to demonstrate CSS transition and transformation. <!DOCTYPE html> <html> <head> <title>CSS Transition and Transformation Example</title> <style> .box { width: 100px; height: 100px; background-color: blue; transition: transform 1s, background-color 1s; .box:hover { transform: rotate(45deg); background-color: red; } </style> </head> <body> <h1>CSS Transition and Transformation Example</h1> <div class="box"></div> </body> </html>



7. Write a HTML/5 program to turn on/off a light bulb using JavaScript. Make use of .gif image and buttons.

```
<!DOCTYPE html>
<html>
<head>
  <title>Light Bulb On/Off Example</title>
  <style>
    #lightBulb {
       width: 200px;
      height: 300px;
  </style>
</head>
<body>
  <h1>Light Bulb On/Off Example</h1>
  <img id="lightBulb" src="light_off.gif" alt="Light Bulb">
  <br>>
  <button onclick="turnOn()">Turn On</button>
  <button onclick="turnOff()">Turn Off</button>
  <script>
    function turnOn() {
       document.getElementById("lightBulb").src = "light_on.gif";
    function turnOff() {
       document.getElementById("lightBulb").src = "light_off.gif";
  </script>
</body>
</html>
```