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# Web Programming – Lab Assignment 6

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## LAB 6 - HTML:

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>CSS Animation Workshop</title>

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

</head>

<body>


  <h1>CSS Animation Exercises</h1>


  <div class="container">

    <div class="card">

      <h3>1. Bouncing & Morphing</h3>

      <div class="canvas">
```

```

        <div class="bouncing-ball"></div>

    </div>

</div>

<div class="card">

    <h3>2. Horizontal Square</h3>

    <div class="canvas">

        <div class="moving-square"></div>

    </div>

</div>

<div class="card">

    <h3>3. Rotating Polygon</h3>

    <div class="canvas">

        <div class="triangle"></div>

    </div>

</div>

<div class="card">

    <h3>4. SVG Animation</h3>

    <div class="canvas">

        <svg width="100%" height="100">

            <circle class="animated-svg-circle" cx="30" cy="50"
r="20" />

        </svg>

    </div>

</div>

```

```
<div class="card">

  <h3>5. Combined Animations</h3>

  <div class="canvas">

    <div class="multi-anim-box">Multi</div>

  </div>

</div>

</div>

</body>

</html>
```

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## LAB 6 – CSS:

```
/* General Layout Styles */

body {

  background-color: #121212;

  color: #e0e0e0;

  font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;

  display: flex;

  flex-direction: column;

  align-items: center;
```

```
padding: 20px;
}

.container {
    display: flex;
    flex-wrap: wrap;
    gap: 20px;
    justify-content: center;
    max-width: 1200px;
}

.card {
    background: #1e1e1e;
    border: 1px solid #333;
    border-radius: 12px;
    padding: 20px;
    width: 300px;
    text-align: center;
}

.canvas {
    height: 150px;
    width: 100%;
    position: relative;
    overflow: hidden;
    background: #252525;
```

```
border-radius: 8px;

margin-top: 10px;

display: flex;

align-items: center;

justify-content: center;

}

/* 1. Bouncing ball: shape and color change */

.bouncing-ball {

  width: 50px;

  height: 50px;

  background-color: #ff4b2b;

  border-radius: 50%;

  animation: bounceMorph 2s infinite alternate ease-in-out;

}

@keyframes bounceMorph {

  0% {

    transform: translateY(-40px);

    border-radius: 50%;

    background-color: #ff416c;

  }

  100% {

    transform: translateY(40px);

    border-radius: 0%;

    background-color: #ffb88c;

  }

}
```

```

    }
}

/* 2. Blue square: rotate, move, color change */
.moving-square {
    width: 40px;
    height: 40px;
    background-color: #00d2ff;
    animation: slideRotate 3s infinite alternate ease-in-out;
}

@keyframes slideRotate {
    0% {
        transform: translateX(-80px) rotate(0deg);
        background-color: #00d2ff;
    }
    100% {
        transform: translateX(80px) rotate(360deg);
        background-color: #3a7bd5;
    }
}

/* 3. Rotating Triangle (Polygon) */
.triangle {
    width: 0;
    height: 0;

```

```

border-left: 30px solid transparent;

border-right: 30px solid transparent;

border-bottom: 50px solid #ffcc00;

animation: spin 4s linear infinite;
}

@keyframes spin {

    from { transform: rotate(0deg); }

    to { transform: rotate(360deg); }

}

/* 4. SVG Animation: Circle moving along X-axis */

.animated-svg-circle {

    fill: #00ff88;

    animation: svgMoveX 2s infinite alternate ease-in-out;

}

@keyframes svgMoveX {

    from { cx: 30; fill: #00ff88; }

    to { cx: 250; fill: #60efff; }

}

/* 5. Multiple Animations: Scale + Pulse + Border Color */

.multi-anim-box {

    width: 60px;

    height: 60px;

```

```
background-color: #9d50bb;

display: flex;

align-items: center;

justify-content: center;

font-weight: bold;

border: 4px solid white;

/* Applying three separate animations */

animation:

    pulse 1.5s infinite alternate,

    colorShift 3s infinite linear,

    wobble 2s infinite ease-in-out;
}

@keyframes pulse {

    from { transform: scale(1); }

    to { transform: scale(1.2); }

}

@keyframes colorShift {

    0% { border-color: #ff0080; }

    50% { border-color: #7928ca; }

    100% { border-color: #ff0080; }

}

@keyframes wobble {

    0% { transform: scale(1.2) rotate(0deg); }
```

```
25% { transform: scale(1.2) rotate(5deg); }

75% { transform: scale(1.2) rotate(-5deg); }

100% { transform: scale(1.2) rotate(0deg); }

}
```

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## LAB 6 – Screen Capture:



