

TRansition

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <title>Document</title>
  <style>
    div{
width: 100px;
height: 100px;
background-color: brown;
transition: width 2s , height 2s;

}

div:hover{
  width: 300px;
  height: 300px;
}
  </style>
</head>

<body>
  <div>

  </div>
</body>
</html>
```

The transition-timing-function Property

transition -timing-function

Ease in → specifies transition with slow start

Ease-out – specifies transition with slow end

ease -in-out → slow → start and end

Linear → same speed s

Cubic-bezier (n,n,n,n)

```
<!DOCTYPE html>
<html>
<head>
<style>
div {
  width: 100px;
  height: 100px;
  background: red;
  transition: width 2s;}
#div1 {transition-timing-function: linear;}
#div2 {transition-timing-function: ease;}
#div3 {transition-timing-function: ease-in;}
#div4 {transition-timing-function: ease-out;}
#div5 {transition-timing-function: ease-in-out;}
div:hover {
  width: 300px;
}
</style>
</head>
<body>
<h1>The transition-timing-function Property</h1>
<p>Hover over the div elements below, to see the different speed
curves:</p>
<div id="div1">linear</div><br>
<div id="div2">ease</div><br>
<div id="div3">ease-in</div><br>
<div id="div4">ease-out</div><br>
<div id="div5">ease-in-out</div><br>
</body>
</html>
```

ToolTip (tRANSITION dELAY)

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
```

```
<meta name="viewport" content="width=device-width,
initial-scale=1.0">
<title>Document</title>
<style>
    .button{
        display: inline-block;
        padding: 10 px 20 px ;
        background-color: blue;
        color: white;

        position: relative
    }

    .button .tooltip{

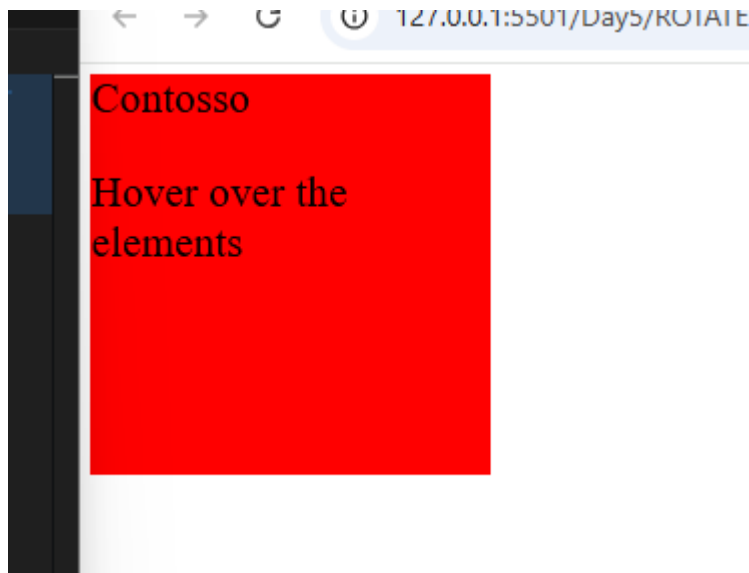
        position: absolute;
        left: 50%;

        transform: translateX(-50%);
        background-color: rgb(8, 8, 8);
        color: white;
        padding: 5px 10px;
        font-size: 12px;
        opacity: 0;
        transition: opacity 0.3s ease, transform 3s ease;
        transition-delay: 1s;
    }

    .button:hover .tooltip{
        opacity: 1;
        transform: translateX(-50%) translateY(-5px);
    }
</style>
</head>
<body>
    <button class="button">
        Hover Me
        <span class="tooltip"> This is a tooltip with a delay </span>
    </button>

</body>
</html>
```

Rotate and transform



```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <title>Document</title>
<style>
  div{
    width: 100px;
    height: 100px;
    background: red;
    transition: width 2s , height 2s , transform 2s ;
  }
```

```

    div p{
        display: none;
    }
    div:hover{
        width: 300px;
        height: 300px;
        transform: rotate(360deg) ;
        font-size: 2em;
    }
    div:hover p{
        display: block;
    }
</style>
</head>
<body>
    <div>
        Contosso
        <p> Hover over the elements</p>
    </div>
</body>
</html>

```

CSS ANIMATIONS

CSS ANIMATIONS — enable to animate transitions between CSS STATES

@keyframes and animation

♦ **KEYFRAME** — Defines the keyframes animations or steps

```

@keyframes animation-name{
0%{
}
50%{}
100%{}

}

```

Animation: shorthand property

Animation-name duration timing-function-delay iteration-count direction fill-mode
play-state pauses or resumes animation



```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <title>Document</title>
  <style>
    .stage{
      background: rgb(189, 189, 189);
      border-radius: 6px;
      height: 150px;
      position: relative;
      min-width: 540px;
    }
    @keyframes slide{
      0%{
        left: 0;
        top:0;
      }
      50%{
        left: 244px;
        top:100px;
      }
      100%{
        left : 488px;
        top:0;
      }
    }

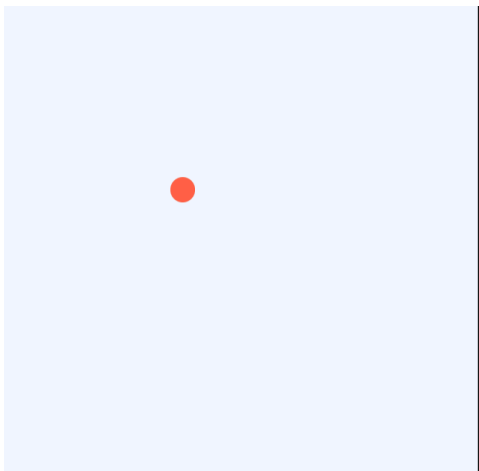
    .stage:hover .ball{
      animation: slide 2s linear infinite ;
    }
  </style>
</head>
<body>
  <div class="stage">
    <div class="ball"></div>
  </div>
</body>
</html>
```

```

        .ball{
            background: rgb(3, 100, 3);
            border-radius: 50%;
            height: 50px;
            width: 50px;
            position: absolute;
        }
    </style>
</head>
<body>
    <body>
        <div class="stage">
            <figure class="ball"></figure>
        </div>
    </body>
</body>
</html>

```

Ball Bounce



```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Bouncing Ball</title>
    <style>
        @keyframes bounce {

```

```
    0%, 100% {
      transform: translateY(0);
    }
    50% {
      transform: translateY(-200px);
    }
  }
</style>
</head>
<body style="margin: 0; display: flex; justify-content: center;
align-items: center; height: 100vh; background-color: #f0f8ff;
overflow: hidden;">
  <div style="
    width: 50px;
    height: 50px;
    background-color: #ff6347;
    border-radius: 50%;
    animation: bounce 1.5s infinite ease-in-out;
  "></div>
</body>
</html>
```

Animation practice

CSS Animation Practice

Fade

Slide

Rotate

Scale

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <title>Document</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      display: flex;
      flex-direction: column;
      align-items: center;
      justify-content: center;
      height: 100vh;
      margin: 0;
      background: linear-gradient(120deg, #f6d365, #fda085);
    }

    h1 {
      animation: fadeIn 2s ease-in-out;
      color: white;
      margin-bottom: 40px;
    }
  </style>
</head>
</html>
```

```
.box-container {
  display: flex;
  gap: 20px;
}

.box {
  width: 100px;
  height: 100px;
  display: flex;
  justify-content: center;
  align-items: center;
  color: white;
  font-weight: bold;
  border-radius: 8px;
  text-align: center;
}

/* Animations for individual boxes */
.fade-box {
  background-color: #6c5ce7;
  animation: fadeIn 2s ease-in-out infinite alternate;
}

.slide-box {
  background-color: #00cec9;
  animation: slideUp 1.5s ease-in infinite alternate;
}

.rotate-box {
  background-color: #e17055;
  animation: rotate 3s linear infinite;
}

.scale-box {
  background-color: #fddcb6;
  animation: scaleUp 1.5s ease-in-out infinite alternate;
}

@keyframes fadeIn{
  from{
    opacity: 0;
  }
  to{
    opacity:1;
  }
}
```

```

    }
}

@keyframes slideUp{
    from{
        transform: translateY(50px)
    }
    to{
        transform: translateY(0px)
    }
}

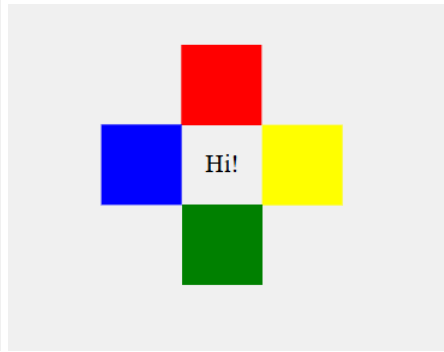
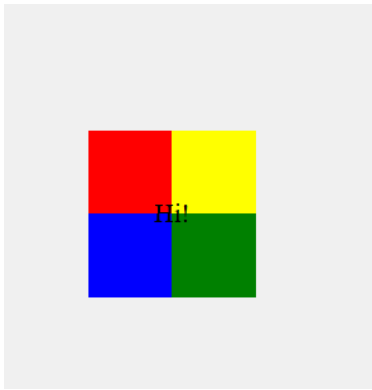
@keyframes rotate{
    from{
        transform: rotate(0deg);
    }
    to{
        transform: rotate(360deg);
    }
}

@keyframes scaleUp{
    from{
        transform: scale(1);
    }
    to{
        transform: scale(1.5);
    }
}

</style>
</head>
<body>
    <h1>CSS Animation Practice</h1>
    <div class="box-container">
        <div class="box fade-box">Fade</div>
        <div class="box slide-box">Slide</div>
        <div class="box rotate-box">Rotate</div>
        <div class="box scale-box">Scale</div>
    </div>
</body>
</html>

```

Box Open Up



```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <title>Document</title>
<style>
    html,
    body {
      width: 100%;
      height: 100%;
      margin: 0;
      display: flex;
      justify-content: center;
      align-items: center;
      background-color: #f0f0f0;
    }

    div#main {
      position: relative;
      height: 200px;
      width: 200px;
      margin: auto;
      cursor: pointer;
    }

    div#main .content {
      position: absolute;
      text-align: center;
      width: 200px;
      top: 50%;
      transform: translate(0, -50%);
```

```

        font-size: 24pt;
        z-index: 10;
    }

    div#main .topleft,
    div#main .topright,
    div#main .bottomleft,
    div#main .bottomright {
        display: inline-block;
        position: absolute;
        width: 100px;
        height: 100px;
        transition: transform 0.5s ease-in-out, top 0.5s
ease-in-out, left 0.5s ease-in-out;
    }

    div#main .topleft{
        top:0;
        left:0px;
        background-color: red;
        transform-origin: bottom right;
    }

div#main .topright{
    top:0;
    left:100px;
    background-color: rgb(201, 255, 75);
    transform-origin: bottom left;
}

div#main .bottomleft{
    top:100px;
    left:0px;
    background-color: rgb(22, 6, 247);
    transform-origin: top right;
}

div#main .bottomright{
    top:100px;
    left:100px;
    background-color: rgb(0, 255, 149);
    transform-origin: top left;
}

div#main:hover .topleft{

```

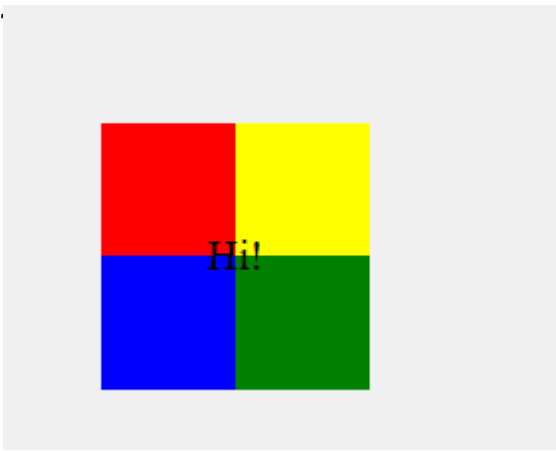
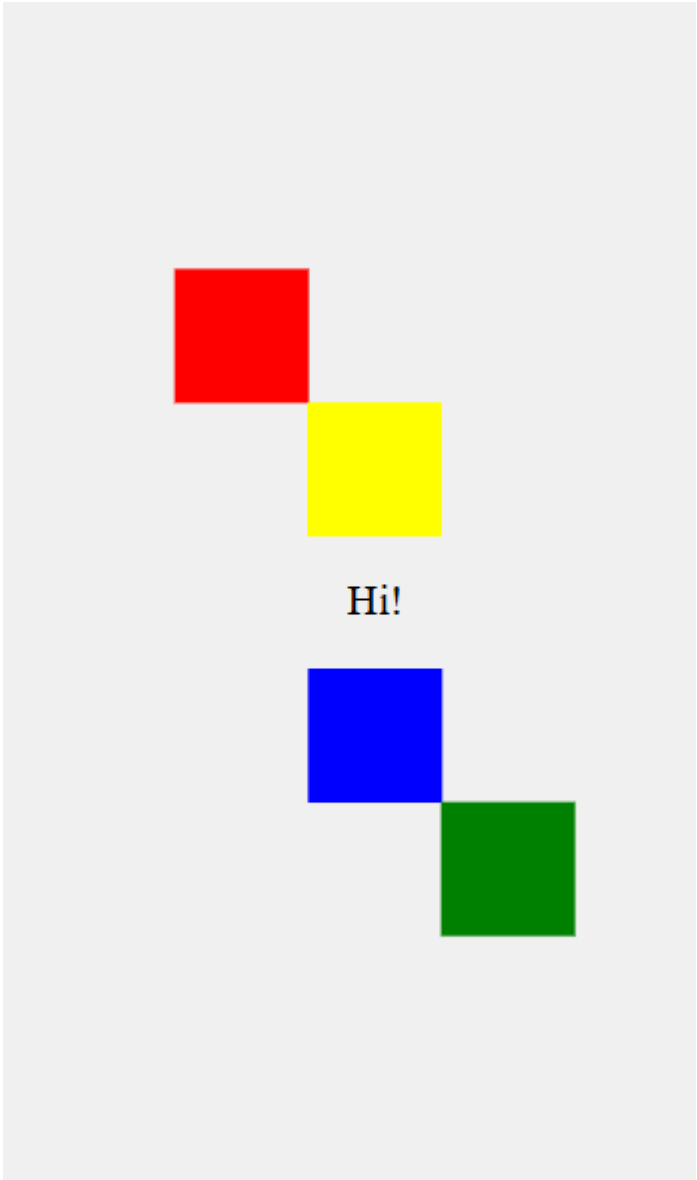
```
        transform: rotate(90deg) ;
        top: -50px;
        left: -50px;
    }

div#main:hover .topright{
    transform: rotate(90deg) ;
    top: -50px;
    left: 150px;
}

div#main:hover .bottomleft{
    transform: rotate(90deg) ;
    top: 150px;
    left: -50px;
}

div#main:hover .bottomright{
    transform: rotate(90deg) ;
    top: 150px;
    left: 150px;
}
</style>

</head>
<body>
    <div id ="main">
        <div class="content">Hi</div>
        <div class="topleft"></div>
        <div class="topright"></div>
        <div class="bottomleft"></div>
        <div class="bottomright"></div>
    </div>
</body>
</html>
```



```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <title>Document</title>
  <style>
    html,
    body {
      width: 100%;
      height: 100%;
      margin: 0;
      display: flex;
      justify-content: center;
      align-items: center;
      background-color: #f0f0f0;
    }

    div#main {
      position: relative;
      height: 200px;
      width: 200px;
      margin: auto;
      cursor: pointer;
    }

    div#main .content {
      position: absolute;
      text-align: center;
      width: 200px;
      top: 50%;
      transform: translate(0, -50%);
      font-size: 24pt;
      z-index: 10;
    }

    div#main .topleft,
    div#main .topright,
    div#main .bottomleft,
    div#main .bottomright {
      display: inline-block;
      position: absolute;
```



```
        width: 100px;
        height: 100px;
        transition: transform 0.5s ease, top 0.5s ease, left 0.5s
ease;
    }

    div#main .topleft {
        top: 0;
        left: 0;
        background: red;
        transform-origin: 100% 0;
    }

    div#main .topright {
        top: 0;
        left: 100px;
        background: yellow;
        transform-origin: 0 0;
    }

    div#main .bottomleft {
        top: 100px;
        left: 0;
        background: blue;
        transform-origin: 100% 100%;
    }

    div#main .bottomright {
        top: 100px;
        left: 100px;
        background: green;
        transform-origin: 0 100%;
    }

    /* Hover effect: Open the boxes and separate them */
    div#main:hover .topleft {
        transform: rotate(90deg);
        top: -50px;
        left: -50px;
    }

    div#main:hover .topright {
        transform: rotate(90deg);
```

```

        top: -50px;
        left: 150px;
    }

    div#main:hover .bottomleft {
        transform: rotate(90deg);
        top: 150px;
        left: -50px;
    }

    div#main:hover .bottomright {
        transform: rotate(90deg);
        top: 150px;
        left: 150px;
    }
</style>
</head>
<body>

<h1>Exercise</h1>
<p>Hover over the div element below.</p>

<div id="main">
    <div class="content">Hi!</div>
    <div class="topleft"></div>
    <div class="topright"></div>
    <div class="bottomleft"></div>
    <div class="bottomright"></div>
</div>

</body>
</html>

```

Clip path property

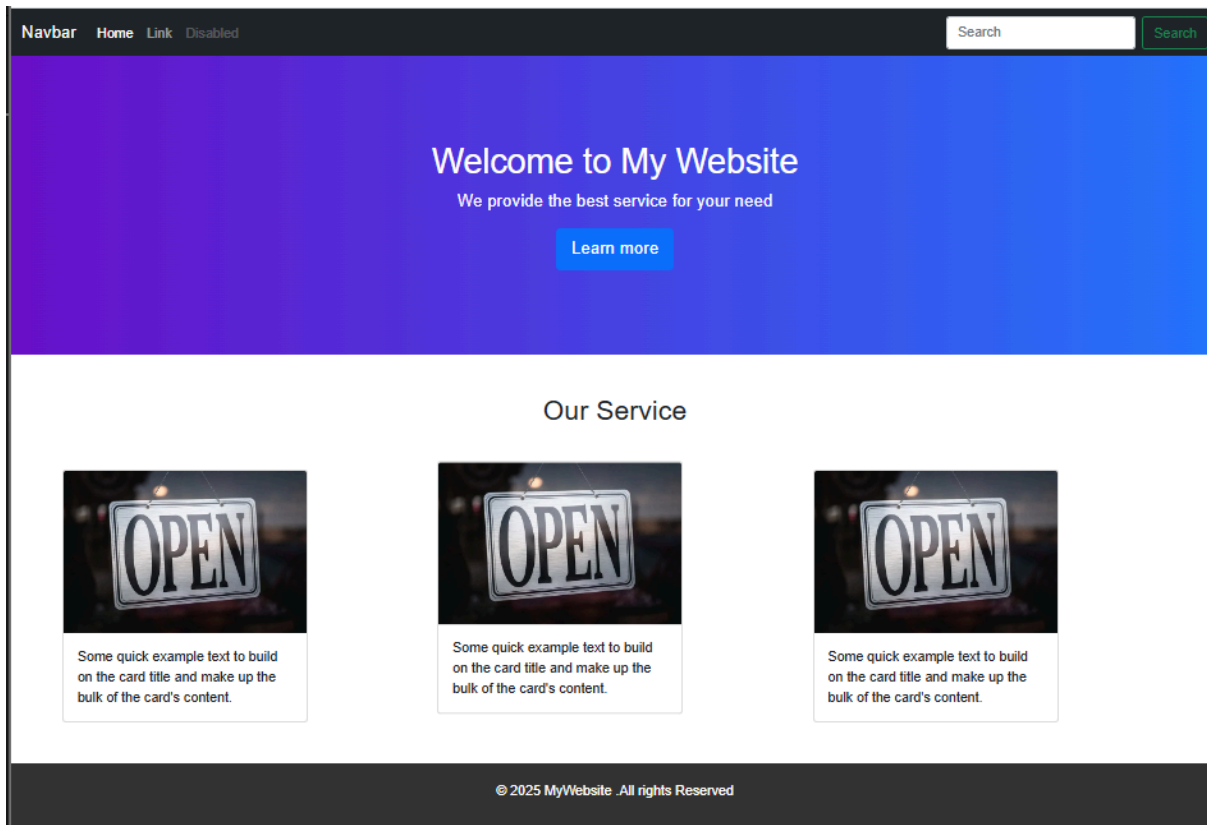
https://www.w3schools.com/cssref/tryit.php?filename=trycss_func_polygon

Cubic bezier

https://www.w3schools.com/cssref/tryit.php?filename=trycss_func_cubic-bezier2

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <title>Document</title>
<style>
  .box{
    width: 100px;
    height: 100px;
    background-color: lightblue;
    animation: movebox 2s cubic-bezier(0.42 , 0 , 0.58, 1) infinite;
  }
@keyframes movebox{
  0%{
    transform : translateX(0);
  }
  50%{
    transform: translateX(120px)
  }
  100%
  {
    transform: translateX(300px);
  }
}
</style>
</head>
<body>
  <div class="box">

  </div>
</body>
</html>
```



```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <title>Document</title>
  <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.m
in.css" rel="stylesheet"
integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65Vohh
puuCOMLAsjC" crossorigin="anonymous">
  <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bun
dle.min.js"
integrity="sha384-MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcX
n/tWtIaxVXM" crossorigin="anonymous"></script>
<style>
```

```

body{
  font-family: 'Arial' , sans-serif;
  width: 100vh;
}
.hero{
  background: linear-gradient(to right , #6a11cb , #2575fc);
  color: white;
  padding: 100px 0;
  text-align : center;
}

.card:hover{
  transform: translateY(-10px);
  transition: all 0.3s ease
}
footer{
  background-color: #333;
  color:white;
  text-align: center;
  padding: 20px;
}
</style>
</head>
<body>
  <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
    <div class="container-fluid">
      <a class="navbar-brand" href="#">Navbar</a>
      <button class="navbar-toggler" type="button"
data-bs-toggle="collapse" data-bs-target="#navbarTogglerDemo02"
aria-controls="navbarTogglerDemo02" aria-expanded="false"
aria-label="Toggle navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse"
id="navbarTogglerDemo02">
        <ul class="navbar-nav me-auto mb-2 mb-lg-0">
          <li class="nav-item">
            <a class="nav-link active" aria-current="page"
href="#">Home</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="#">Link</a>
          </li>

```

```

        <li class="nav-item">
            <a class="nav-link disabled" href="#" tabindex="-1"
aria-disabled="true">Disabled</a>
        </li>
    </ul>
    <form class="d-flex">
        <input class="form-control me-2" type="search"
placeholder="Search" aria-label="Search">
        <button class="btn btn-outline-success"
type="submit">Search</button>
    </form>
</div>
</div>
</nav>
<section class="hero">
<div class="container">
    <h1> Welcome to My Website</h1>
    <p class="lead" > We provide the best service for your need</p>
    <a href="#services" class="btn btn-primary btn-lg">Learn more
</a>
</div>
</section>
<section id="services" class="py-5">
    <div class="container">
        <h2 class="text-center mb-5" > Our Service</h2>

        <div class="row">
            <div class="col-md-4 ">
                <div class="card" style="width: 18rem;">
                    
                    <div class="card-body">
                        <p class="card-text">Some quick example text to
build on the card title and make up the bulk of the card's content.</p>
                    </div>
                </div>

            </div>

            <div class="col-md-4 ">
                <div class="card" style="width: 18rem;">

```

```

        
        <div class="card-body">
            <p class="card-text">Some quick example text to
build on the card title and make up the bulk of the card's content.</p>
        </div>
    </div>
    </div>
    <div class="col-md-4 ">
        <div class="card" style="width: 18rem;">
            
            <div class="card-body">
                <p class="card-text">Some quick example text to
build on the card title and make up the bulk of the card's content.</p>
            </div>
        </div>
    </div>
</section>

<footer>
    <div class="container">
        <p>&copy; 2025 MyWebsite .All rights Reserved</p>
    </div>
</footer>
</body>
</html>

```

Assignment: Create a Responsive Website Using Bootstrap

Objective:

Develop a fully responsive website utilizing Bootstrap's framework to demonstrate your understanding of its grid system, components, and utility classes.

Requirements:

- 1. The website must include the following pages:**
 - **Home Page:** A landing page with a hero section, navbar, and footer.
 - **About Page:** A page describing the website or yourself, featuring a card layout.
 - **Contact Page:** A form for users to submit their contact details.
- 2. Design Elements to Include:**
 - **Use the Bootstrap Grid System** to structure your layout.
 - **Add a Navbar** for navigation across the pages.
 - **Use at least two Bootstrap Components** such as modals, carousels, or cards.
 - **Style buttons and text** using Bootstrap Utility Classes.
 - **Add at least one Responsive Image.**
- 3. Additional Features:**
 - **Ensure the website is mobile-friendly** and adapts seamlessly to different screen sizes.
 - **Include a form validation example** using Bootstrap's built-in validation styles