Practical-7: (Vue JS**)**
Demonstrate how to create a custom directive and how to use it through HTML web pages.:

  I.   Create a custom directive to transform text to uppercase when clicked.
  II.   Creating a Dynamic List with Vue.js Custom Directive
  III.   Create a directive that formats and displays dates in a human-readable format

I. Create a custom directive to transform text to uppercase when clicked.

File: capitalize.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Custom Directive Example</title>
  <script src="https://cdn.jsdelivr.net/npm/vue@2"></script>
</head>
<body>

<div id="app">
  <p v-uppercase>Hello, this text will be uppercased when clicked!</p>
</div>

<script src="app.js"></script>
</body>
</html>
```
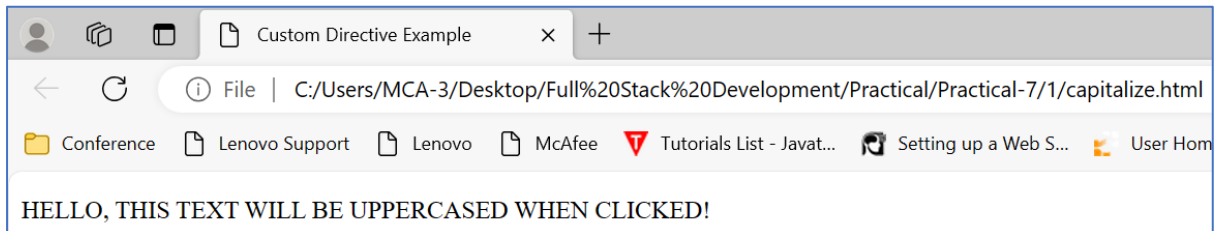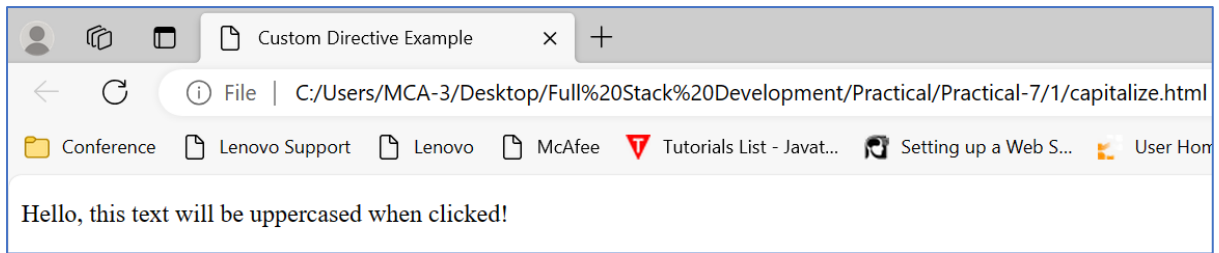
File: app.js

```javascript
Vue.directive('uppercase', {
  bind(el) {
    el.style.cursor = 'pointer';
    el.addEventListener('click', () => {
      const text = el.innerText;
      el.innerText = text.toUpperCase();
    });
  }
});

new Vue({
  el: '#app'
});
```

Output:

Hello, this text will be uppercased when clicked!

HELLO, THIS TEXT WILL BE UPPERCASED WHEN CLICKED!

II. Creating a Dynamic List with Vue.js Custom Directive

File: index.htlm

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Custom Directive Example</title>
  <script src="https://cdn.jsdelivr.net/npm/vue@2"></script>
</head>
<body>

<div id="app">
  <ul v-list="items"></ul>
</div>

<script src="app.js"></script>
</body>
</html>
```
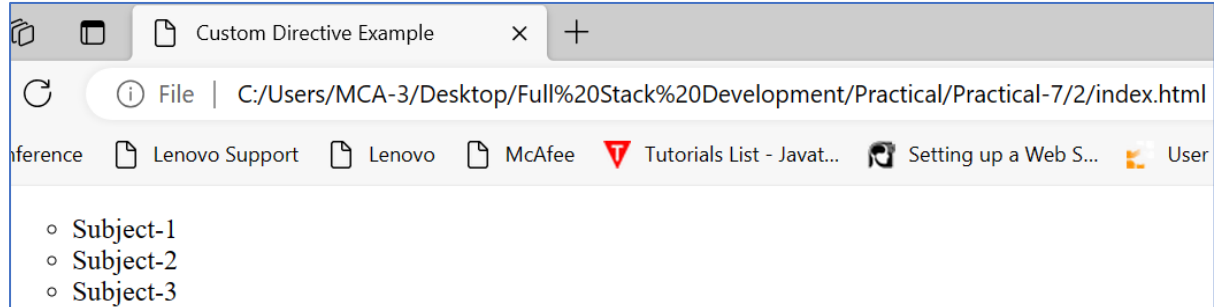
File: app.js

```javascript
Vue.directive('list', {
  bind(el, binding) {
    const ul = document.createElement('ul');
    binding.value.forEach(item => {
      const li = document.createElement('li');
      li.textContent = item;
      ul.appendChild(li);
    });
    el.appendChild(ul);
  }
});

new Vue({
  el: '#app',
```

```
  data: {
    items: ['Subject-1', 'Subject-2', 'Subject-3'] // Sample list of items
  }
});
```

Output:

III. Create a directive that formats and displays dates in a human-readable format

File: v-format.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Custom Directive for Date Formatting</title>
  <script src="https://cdn.jsdelivr.net/npm/vue@2"></script>
</head>
<body>

<div id="app">
  <p v-format-date="date"> <!-- Apply the custom directive -->
    <!-- The content will be manipulated by the custom directive -->
  </p>
</div>

<script>
// Define the custom directive named 'format-date'
Vue.directive('format-date', {
  // When the bound element is inserted into the DOM...
  inserted: function(el, binding) {
    // Get the date from the binding value
    const date = binding.value;

    // Format the date into a human-readable format
    const formattedDate = formatDate(date);

    // Update the element's content with the formatted date
    el.textContent = formattedDate;
  }
});
```

```
// Create a new Vue instance
new Vue({
  el: '#app',
  data: {
    date: '2022-03-05T12:00:00' // Sample date
  }
});

// Helper function to format the date
function formatDate(dateString) {
  const options = { year: 'numeric', month: 'long', day: 'numeric' };
  return new Date(dateString).toLocaleDateString('en-US', options);
}
</script>

</body>
</html>
```

Output:

March 5, 2022