WEEK 1

Aim: To develop different basic Graphical Shapes using HTML5 canvas

Program:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>week 1 practice</title>
    <script>
        function draw(){
            var canvas = document.getElementById('mycanvas')
            var ctx = canvas.getContext('2d')

            ctx.fillStyle = "blue"

            ctx.fillRect(10,10,60,60);
            ctx.fillRect(100,10,80,26);

            ctx.beginPath();
            ctx.arc(220,25,25, 0, 2*Math.PI);
            ctx.fill();

            ctx.beginPath();
            ctx.moveTo(10, 160);
            ctx.lineTo(90, 160)
            ctx.lineTo(50, 110)
            ctx.closePath();
            ctx.fill();
        }
    </script>
</head>
<body onload = 'draw()'>

    <canvas id = 'mycanvas' width = '400px' height = '400px'>

    </canvas>

</body>
</html>
```

OUTPUT:

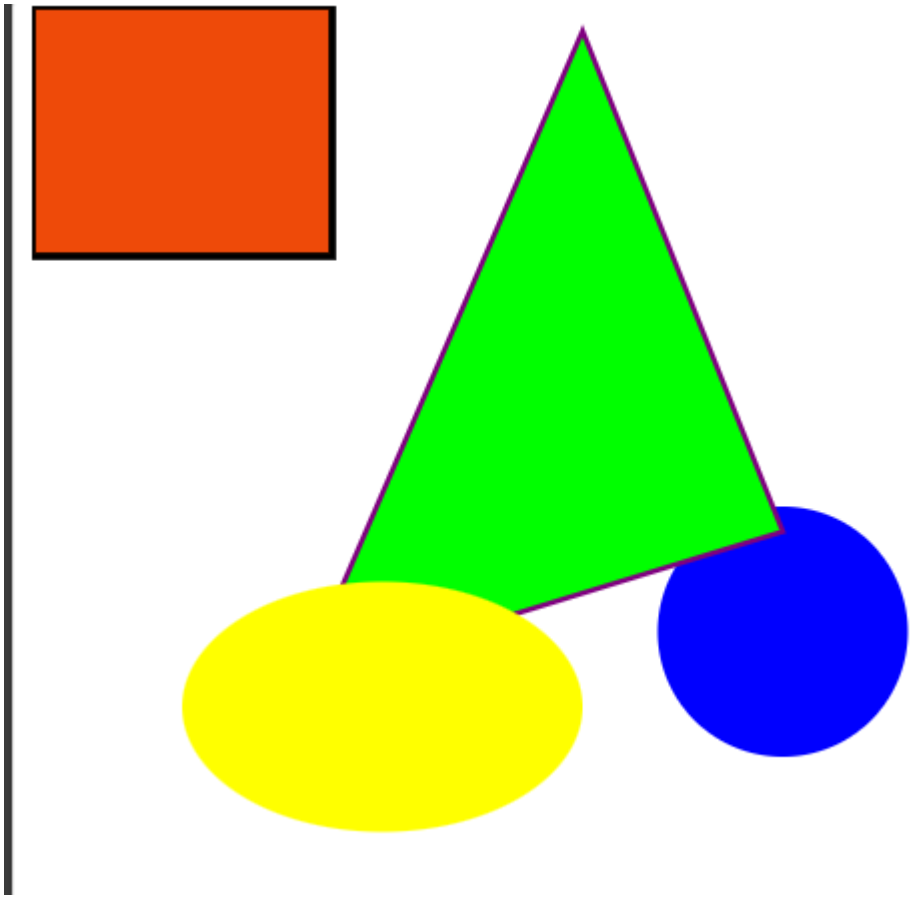
WEEK 2

Aim: To develop different basic Graphical Shapes using HTML5 SVG

Program:

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>SVG Shape</title>
</head>

<body>
    <svg width="600px" height="400px">
        <circle cx="300" cy="250" r="50" fill="blue"></circle>
        <rect width="120" height="100" style="fill: rgb(238, 74 , 9);stroke-width:
3;stroke: rgb(0,0,0);" />

        <polygon points="220,10,300,210,170,250,123,234" style="fill: lime;stroke:
purple;stroke-width: 2;" />

        <ellipse cx="140" cy="280" rx="80" ry="50" style="fill: yellow; stroke-width: 4;"
/>
    </svg>

</body>

</html>
```

OUTPUT:



WEEK -3

Aim: To Develop a javascript code that recives input from the user and get in action based on user input using HTML5 and Javascript

Program:

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>week 3</title>
    <style>
        body {
            background-color: paleturquoise;
            text-align: center;
        }

        h2 {
            text-transform: uppercase;
            font-size: 46px;
            color: blue;
            padding-bottom: 0px;
        }

        img {
            max-width: 100%;
            max-height: auto;
        }

        p {
            text-shadow: 1cqw;
            font-size: 25px;
            color: rgb(48, 126, 243);
        }
    </style>
</head>

<body>
    <h2>WHAT CAN JAVASCRIPT DO?</h2>
    <p>JavaScript can manipulate the html attribute</p>
    <button onclick="document.getElementById('myImage').src='img1.jpeg'">img1</button>
    <img id="myImage" src="img1.jpeg">
    <button onclick="document.getElementById('myImage').src='img2.jpeg'">img2
        ma</button>

</body>
```

```
</html>
```

OUTPUT:


WHAT CAN JAVASCRIPT DO?
JavaScript can manipulate the html attribute
img1
img2 ma


WHAT CAN JAVASCRIPT DO?
JavaScript can manipulate the html attribute
img1
img2 ma

WEEK – 4

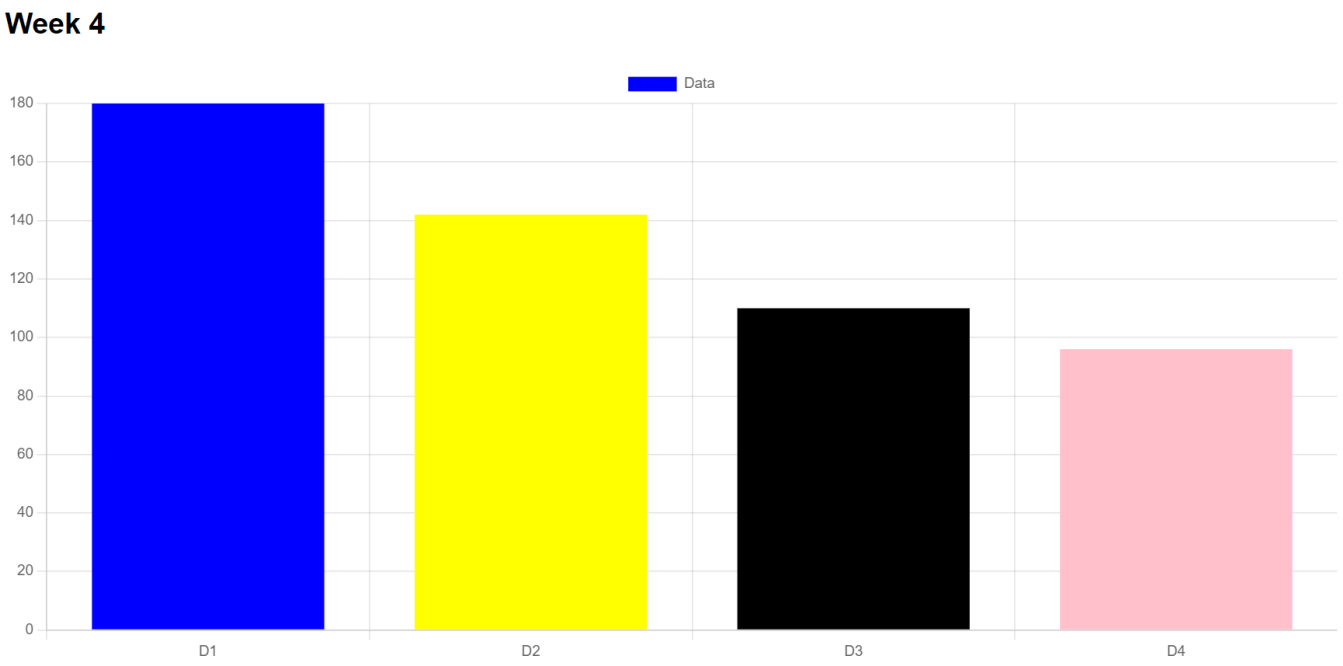
Aim: Draw a simple barchart using HTML5 CANVAS

Program:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Simple Bar Chart with Table</title>
    <script src="https://cdn.jsdelivr.net/npm/chart.js"></script>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 40px;
        }
        table {
            margin-top: 20px;
            border-collapse: collapse;
            width: 100%;
        }
        th, td {
            border: 1px solid #ddd;
            padding: 8px;
            text-align: left;
        }
        th {
            background-color: #f2f2f2;
        }
    </style>
</head>
<body>

    <h2>Week 4</h2>

    <canvas id="myBarChart" width="400" height="200"></canvas>

    <!-- Data Table -->
    <table>
        <thead>
            <tr>
                <th>D1</th>
                <th>Data Value</th>
            </tr>
        </thead>
        <tbody>
            <tr>
                <td>Label 1</td>
                <td>80</td>
            </tr>
```

```
            <tr>
                <td>Label 2</td>
                <td>120</td>
            </tr>
            <tr>
                <td>Label 3</td>
                <td>60</td>
            </tr>
            <tr>
                <td>Label 4</td>
                <td>90</td>
            </tr>
        </tbody>
    </table>

    <script>
        var data = {
            labels: ["D1", "D2", "D3", "D4"],
            datasets: [{
                label: "Data",
                backgroundColor: ["blue", "yellow", "black", "pink"],
                data: [180, 142, 110, 96],
            }]
        };

        var ctx = document.getElementById('myBarChart').getContext('2d');

        var myBarChart = new Chart(ctx, {
            type: 'bar',
            data: data,
            options: {
                scales: {
                    y: {
                        beginAtZero: true
                    }
                }
            }
        });
    </script>

</body>
</html>
```

OUTPUT:



D1	Data Value
Label 1	80
Label 2	120
Label 3	60
Label 4	90

WEEK – 5

Aim: Read the data .txt file and Draw Table and draw simple bar chart

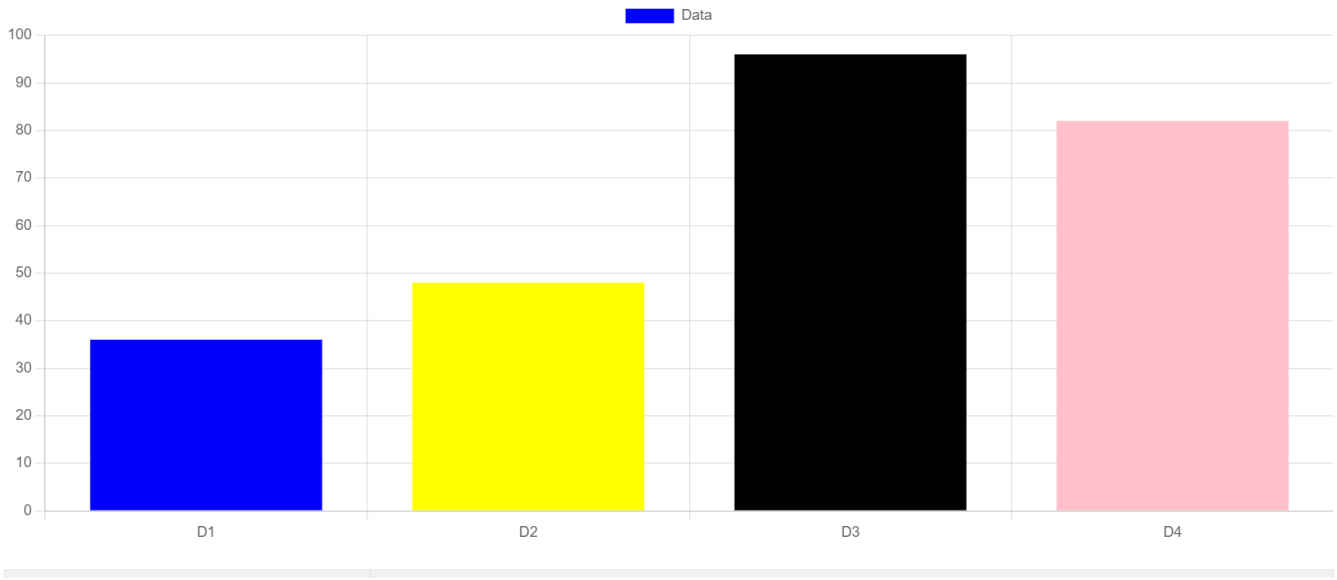
Program:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Simple Bar Chart with Table</title>
    <script src="https://cdn.jsdelivr.net/npm/chart.js"></script>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 40px;
        }
        table {
            margin-top: 20px;
            border-collapse: collapse;
            width: 100%;
        }
        th, td {
            border: 1px solid #ddd;
            padding: 8px;
            text-align: left;
        }
        th {
            background-color: #f2f2f2;
        }
    </style>
</head>
<body>

    <h2>Week 5: reading data from the text file</h2>

    <canvas id="myBarChart" width="400" height="165"></canvas>

    <!-- Data Table -->
    <table id="dataTable">
        <thead>
            <tr>
                <th>D1</th>
                <th>Data Value</th>
            </tr>
        </thead>
        <tbody id='tableBody'>
            <!-- Rows will be added here dynamically -->
        </tbody>
    </table>

    <script type='text/javascript'>
    // Function to load txt file
```

```
    function loadFile() {
      fetch('week5b.txt')
      .then(response => response.text())
      .then(text => {
          const rows = text.split('\n');
          const labels = [];
          const data = [];

          rows.forEach(row => {
              const [label, value] = row.split(',');
              labels.push(label);
              data.push(value);

              // Add row to table
              document.getElementById('tableBody').innerHTML +=
`<tr><td>${label}</td><td>${value}</td></tr>`;
          });

          // Draw chart
          var chartData = {
              labels: labels,
              datasets: [{
                  label: "Data",
                  backgroundColor: ["blue", "yellow", "black", "pink"],
                  data: data,
              }]
          };

          var ctx = document.getElementById('myBarChart').getContext('2d');

          new Chart(ctx, {
              type: 'bar',
              data: chartData,
              options: {
                  scales: {
                      y: { beginAtZero:true }
                  }
               }
           });
       });
    }

    loadFile();
    </script>

</body></html>
```

OUTPUT:

Week 5: reading data from the text file



D1	Data Value
D1	36
D2	48
D3	96
D4	82

week5b.txt

```
1   D1, 36
2   D2, 48
3   D3, 96
4   D4, 82
```

WEEK – 6

Aim: To read the data .csv file and draw Data Table and draw column Bar chart

Program:

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Simple Bar Chart with Table</title>
    <script src="https://cdn.jsdelivr.net/npm/chart.js"></script>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 40px;
        }

        table {
            margin-top: 20px;
            border-collapse: collapse;
            width: 100%;
        }

        th,
        td {
            border: 1px solid #ddd;
            padding: 8px;
            text-align: left;
        }

        th {
            background-color: #f2f2f2;
        }
    </style>
</head>

<body>

    <h2>Week 6: reading data from the csv file</h2>

    <canvas id="myBarChart" width="400" height="165"></canvas>

    <!-- Data Table -->
    <table id="dataTable">
        <thead>
            <tr>
                <th>D1</th>
                <th>Data Value</th>
            </tr>
```

```
    </thead>
    <tbody id='tableBody'>
        <!-- Rows will be added here dynamically -->
    </tbody>
</table>

<script type='text/javascript'>
    // Function to load txt file
    function loadFile() {
        fetch('week6b.csv')
            .then(response => response.text())
            .then(text => {
                const rows = text.split('\n');
                // Declare the labels and data arrays
                var labels = [];
                var data = [];

                // Loop through the rows of the data
                for (var i = 0; i < rows.length; i++) {
                    // Get the value of the ith row
                    var row = rows[i];
                    // Split the row by comma to get the label and value
                    var [label, value] = row.split(",");
                    // Push the label and value to the arrays
                    labels.push(label);
                    data.push(value);
                    // Create a table row element
                    var tr = document.createElement("tr");
                    // Create a table cell element for the label
                    var td1 = document.createElement("td");
                    td1.textContent = label;
                    // Create a table cell element for the value
                    var td2 = document.createElement("td");
                    td2.textContent = value;
                    // Append the cells to the row
                    tr.appendChild(td1);
                    tr.appendChild(td2);
                    // Append the row to the table body
                    document.getElementById('tableBody').appendChild(tr);
                }


                // Draw chart
                var chartData = {
                    labels: labels,
                    datasets: [{
                        label: "Data",
                        backgroundColor: ["blue", "yellow", "black", "pink"],
                        data: data,
                    }]
                };

                var ctx = document.getElementById('myBarChart').getContext('2d');
```

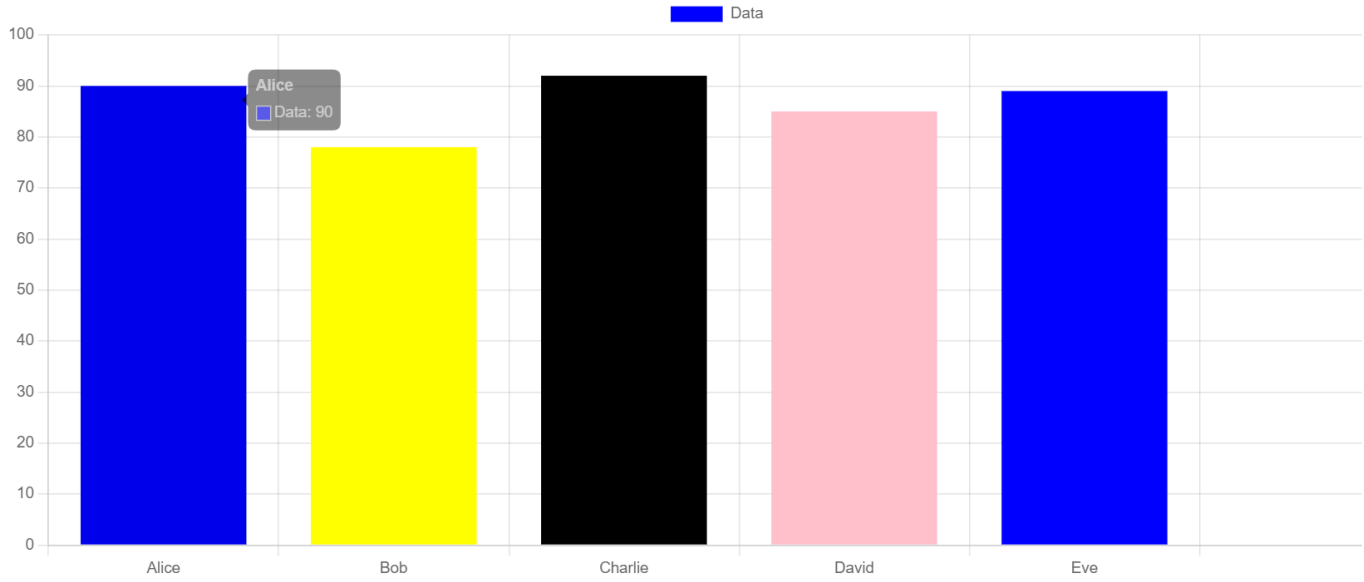
```
                    new Chart(ctx, {
                        type: 'bar',
                        data: chartData,
                        options: {
                            scales: {
                                y: { beginAtZero: true }
                            }
                        }
                    });
                });
        }

        loadFile();
    </script>

</body>

</html>
```

week6b.csv > data

```
1   Alice,90
2   Bob,78
3   Charlie,92
4   David,85
5   Eve,89
6
```

OUTPUT

Week 6: reading data from the csv file



D1	Data Value
Alice	90
Bob	78
Charlie	92
David	85
Eve	89

WEEK – 7

AIM: Read the data XML file and Draw Table and draw simple bar chart

Program:

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Simple Bar Chart with Table</title>
    <script src="https://cdn.jsdelivr.net/npm/chart.js"></script>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 40px;
        }

        table {
            margin-top: 20px;
            border-collapse: collapse;
            width: 100%;
        }

        th,
        td {
            border: 1px solid #ddd;
            padding: 8px;
            text-align: left;
        }

        th {
            background-color: #f2f2f2;
        }
    </style>
</head>

<body>

    <h2>Week 7: reading data from the xml file</h2>

    <canvas id="myBarChart" width="400" height="165"></canvas>

    <!-- Data Table -->
    <table id="dataTable">
        <thead>
            <tr>
                <th>D1</th>
                <th>Data Value</th>
            </tr>
        </thead>
        <tbody id='tableBody'>
```

```
        <!-- Rows will be added here dynamically -->
    </tbody>
</table>

<script type='text/javascript'>
    // Function to load txt file
    function loadFile() {
        fetch('week7a.xml')
            .then(response => response.text())
            .then(str => {
                // Parse the XML string
                let parser = new DOMParser();
                let xml = parser.parseFromString(str, "text/xml");

                // Declare the labels and data arrays
                var labels = [];
                var data = [];

                // Get all the 'row' elements from the XML
                let rows = xml.getElementsByTagName('row');

                // Loop through the rows of the data
                for (let i = 0; i < rows.length; i++) {
                    // Get the value of the ith row
                    let row = rows[i];
                    // Get the label and value from the row element
                    let label = row.getElementsByTagName('name')[0].textContent;
                    let value = row.getElementsByTagName('score')[0].textContent;
                    // Push the label and value to the arrays
                    labels.push(label);
                    data.push(value);
                    // Create a table row element
                    var tr = document.createElement("tr");
                    // Create a table cell element for the label
                    var td1 = document.createElement("td");
                    td1.textContent = label;
                    // Create a table cell element for the value
                    var td2 = document.createElement("td");
                    td2.textContent = value;
                    // Append the cells to the row
                    tr.appendChild(td1);
                    tr.appendChild(td2);
                    // Append the row to the table body
                    document.getElementById('tableBody').appendChild(tr);
                }


                // Draw chart
                var chartData = {
                    labels: labels,
                    datasets: [{
                        label: "Data",
                        backgroundColor: ["blue", "yellow", "black", "pink"],
                        data: data,
```

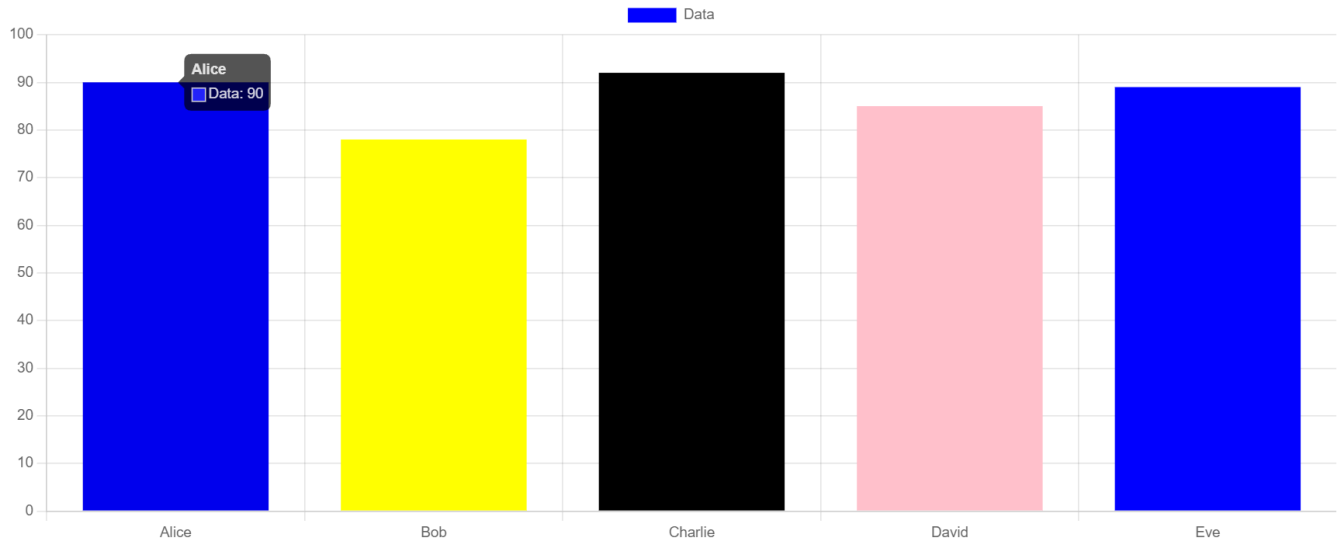
```
                    }]
                };

                var ctx = document.getElementById('myBarChart').getContext('2d');

                new Chart(ctx, {
                    type: 'bar',
                    data: chartData,
                    options: {
                        scales: {
                            y: { beginAtZero: true }
                        }
                    }
                });
            });
        }

        loadFile();
    </script>

</body>

</html>
```

week7a.xml

```
<rows>
    <row>
        <name>Alice</name>
        <score>90</score>
    </row>
    <row>
        <name>Bob</name>
        <score>78</score>
    </row>
    <row>
        <name>Charlie</name>
        <score>92</score>
    </row>
    <row>
        <name>David</name>
        <score>85</score>
    </row>
    <row>
        <name>Eve</name>
        <score>89</score>
    </row>
</rows>
```

OUTPUT:

Week 7: reading data from the xml file



D1	Data Value
Alice	90
Bob	78
Charlie	92
David	85
Eve	89