

**Create a data visualization (e.g., pie charts, bar graphs) for an inventory management system using javascript**

**AIM:**

The aim is to create data visualizations, such as pie charts and bar graphs, for an inventory management system using JavaScript.

**PROCEDURE:****Step 1: Set Up Your HTML File**

First, create an HTML file to hold your canvas for the chart and include Chart.js.

html

```
<!DOCTYPE html>

<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Inventory Management Visualization</title>
  <style> body { font-family: Arial,
    sans-serif; text-align: center;
    margin: 50px;
    } canvas { margin:
    20px auto;
    }
  </style>
</head>
<body>
  <h1>Inventory Management System</h1>
```

```
<canvas id="pieChart" width="400" height="400"></canvas>
<canvas id="barChart" width="400" height="400"></canvas>
<script src="https://cdn.jsdelivr.net/npm/chart.js"></script>
<script src="script.js"></script>
</body>
</html>
```

## Step 2: Create the JavaScript File for Charts

Next, create a JavaScript file (script.js) to handle the data visualization logic.

javascript

□// script.js

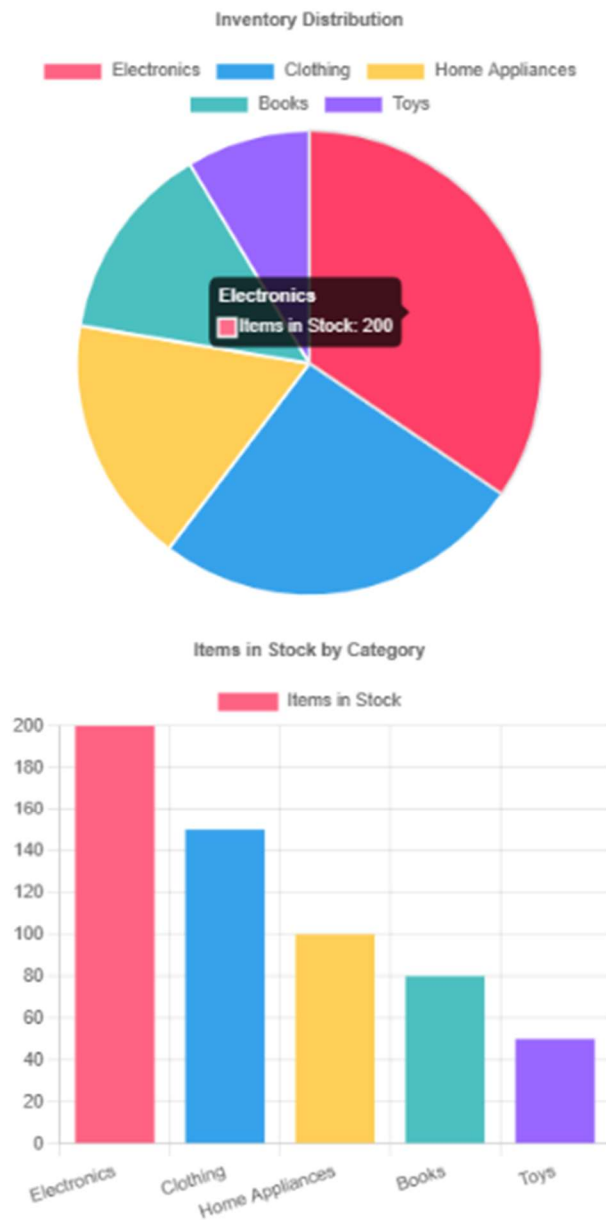
```
// Data for the inventory const inventoryData = { labels: ['Electronics',
'Clothing', 'Home Appliances', 'Books', 'Toys'], datasets: [
  { label: 'Items in Stock', data:
    [200, 150, 100, 80, 50],
    backgroundColor: [
      '#FF6384',
      '#36A2EB',
      '#FFCE56',
      '#4BC0C0',
      '#9966FF'
    ],
  },
]
};

// Creating the Pie Chart const ctxPie =
document.getElementById('pieChart').getContext('2d'); const
```

```
pieChart = new Chart(ctxPie, { type: 'pie', data: inventoryData,
options: { responsive: true, title: {
    display: true, text:
    'Inventory Distribution'
  }
}
});
```

```
// Creating the Bar Chart const ctxBar =
document.getElementById('barChart').getContext('2d'); const
barChart = new Chart(ctxBar, { type: 'bar', data: inventoryData,
options: { responsive: true, title: {
    display: true,
    text: 'Items in Stock by Category'
  }, scales: {
    yAxes: [{
      ticks: {
        beginAtZero: true
      }
    }]
  }
}
});
```

## Output



## Result

Therefore, data visualizations like pie charts and bar graphs were created using JavaScript to enhance the inventory management system's data presentation.