

## UID EX 10

**Ridhanya J**  
**230701264**

### **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

```
<!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>

  <!-- Include Chart.js -->
  <script src="https://cdn.jsdelivr.net/npm/chart.js"></script>
  <!-- Link to your JS file -->
  <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.

```
// Data for 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'
    ]
  }]
};

// PIE Chart
const ctxPie = document.getElementById('pieChart').getContext('2d');
new Chart(ctxPie, {
  type: 'pie',
  data: inventoryData,
  options: {
    responsive: true,
    plugins: {
      title: {
        display: true,
        text: 'Inventory Distribution'
      }
    }
  }
});
```

```
// BAR Chart
const ctxBar = document.getElementById('barChart').getContext('2d');
new Chart(ctxBar, {
  type: 'bar',
  data: inventoryData,
  options: {
    responsive: true,
    plugins: {
      title: {
        display: true,
        text: 'Items in Stock by Category'
      }
    },
    scales: {
      y: {
        beginAtZero: true
      }
    }
  }
});
```

---

OUTPUT:

# Inventory Management System

