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
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',
```

```javascript
                '#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,
```

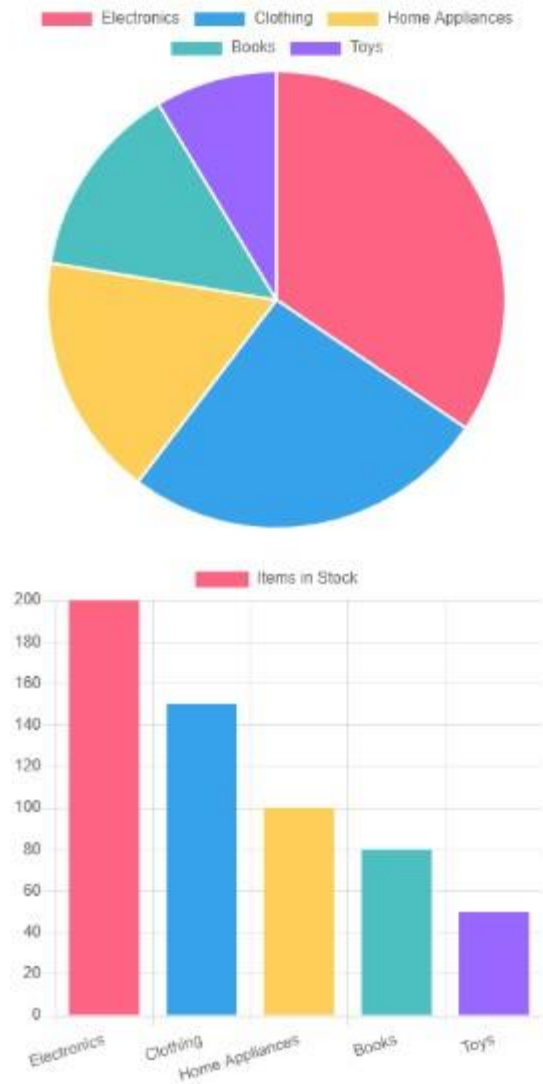```
  options: {
    responsive: true,
    title: {   display:
    true,   text:
    'Items in Stock by
    Category'
      },   scales: {
        yAxes: [{   ticks: {
          beginAtZero: true
            }
          }]
        }
      }
    });
```

**OUTPUT:**

# Inventory Management System



**RESULT:**

**Hence,the required output is obtained and verified successfully.**