

<!-- PRACTICAL-13: Write a JavaScript to create election map. The code should have two candidates running for president and display the number of votes they received from each state, both in a table on the bottom right and when you hover mouse over a state. [Hint: BOM, DOM, Events] [Bonus: Created map should change the colour and pop the name of the state.]

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<!-- CODE -->

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>PRACTICAL-13 (ELECTION MAP)</title>

<style>

#map {

width: 600px;

height: 400px;

position: relative;

border: 1px solid #ccc;

}

#map svg {

width: 100%;

height: 100%;

}

#info {

position: absolute;

bottom: 10px;

right: 10px;

background-color: white;

padding: 10px;

border: 1px solid #ccc;

}

</style>

</head>

<body>

<div id="map"></div>

<div id="info">

<h3>Election Results</h3>

<table id="results">

<tr>

<th>State</th>

<th>Candidate 1</th>

<th>Candidate 2</th>

</tr>

</table>

</div>

<script src="election-map.js">

const electionData = {

"California": { candidate1: 3000000, candidate2: 2500000 },

"Texas": { candidate1: 2800000, candidate2: 3200000 },

"New York": { candidate1: 2000000, candidate2: 1800000 },

};

const mapContainer = document.getElementById('map');

const infoDiv = document.getElementById('info');

const resultsTable = document.getElementById('results');

```

56 const electionMap = document.createElementNS("http://www.w3.org/2000/svg", "svg");
57 electionMap.setAttribute('width', '100%');
58 electionMap.setAttribute('height', '100%');
59 mapContainer.appendChild(electionMap);
60 electionMap.addEventListener('mouseover', (event) => {
61   if (event.target.tagName === 'path') {
62     const stateName = event.target.getAttribute('data-state');
63     const stateData = electionData[stateName];
64
65     if (stateData) {
66       const html = `<h3>${stateName}</h3>
67         <p>Candidate 1: ${stateData.candidate1}</p>
68         <p>Candidate 2: ${stateData.candidate2}</p>`;
69       infoDiv.innerHTML = html;
70     }
71   }
72 });
73 for (const stateName in electionData) {
74   const statePath = document.createElementNS("http://www.w3.org/2000/svg", "path");
75   statePath.setAttribute('d', getStatePath(stateName));
76   statePath.setAttribute('data-state', stateName);
77   statePath.setAttribute('fill', '#ccc');
78   statePath.setAttribute('stroke', '#333');
79   electionMap.appendChild(statePath);
80 }
81 function getStatePath(stateName) {
82   const paths = {
83     "California": "M 10,30 L 40,30 L 40,70 L 10,70 Z",
84     "Texas": "M 50,50 L 80,50 L 80,90 L 50,90 Z",
85     "New York": "M 90,10 L 120,10 L 120,50 L 90,50 Z",
86   };
87   return paths[stateName];
88 }
89 for (const stateName in electionData) {
90   const stateData = electionData[stateName];
91   const row = resultsTable.insertRow();
92   row.insertCell(0).textContent = stateName;
93   row.insertCell(1).textContent = stateData.candidate1;
94   row.insertCell(2).textContent = stateData.candidate2;
95 }
96 </script>
97 </body>
98 </html>

```