

# What I have added

HTML:

```
<h2>Exercise 1: Filter Inventors Born in the 1500's</h2>
<h3>Question: Which inventors were born in the 1500's?</h3>
<table id="fifteen-table">
  <tr>
    <th>First Name</th>
    <th>Last Name</th>
    <th>Birth Year</th>
    <th>Death Year</th>
  </tr>
</table>

<h2>Exercise 2: Inventors' Full Names</h2>
<h3>Question: What are the full names of the inventors?</h3>
<table id="full-name-table">
  <tr>
    <th>Full Name</th>
  </tr>
</table>

<h2>Exercise 3: Sort Inventors by Birthdate</h2>
<h3>Question: How should the inventors be sorted by birthdate?</h3>
<table id="birthdate-table">
  <tr>
    <th>First Name</th>
    <th>Last Name</th>
    <th>Birth Year</th>
    <th>Death Year</th>
  </tr>
</table>

<h2>Exercise 4: Total Years Lived by Inventors</h2>
<h3>Question: What is the total number of years lived by all the
inventors?</h3>
<table id="total-years-table">
  <tr>
    <th>Total Years Lived</th>
  </tr>
</table>

<h2>Exercise 5: Sort Inventors by Years Lived</h2>
<h3>Question: How should the inventors be sorted by years lived?</h3>
<table id="years-lived-table">
  <tr>
```

```

    <th>First Name</th>
    <th>Last Name</th>
    <th>Birth Year</th>
    <th>Death Year</th>
  </tr>
</table>

<h2>Exercise 6: Boulevards in Paris with 'de' in the Name</h2>
<p>Please copy and paste the code into the console of the following
Wikipedia page to see the results:
  <a
href="https://en.wikipedia.org/wiki/Category:Boulevards_in_Paris">https
://en.wikipedia.org/wiki/Category:Boulevards_in_Paris</a>
</p>

<h2>Exercise 7: Sort People Alphabetically by Last Name</h2>
<h3>Question: How should the people be sorted alphabetically by last
name?</h3>
<table id="last-name-table">
  <tr>
    <th>Full Name</th>
  </tr>
</table>

<h2>Exercise 8: Count Instances of Transportation Types</h2>
<h3>Question: Sum up the instances of each of these
  const data = ['car', 'car', 'truck', 'truck', 'bike', 'walk',
'car', 'van', 'bike', 'walk', 'car', 'van', 'car',
  'truck', 'pogostick'];</h3>
<table id="transportation-table">
  <tr>
    <th>Transportation</th>
    <th>Count</th>
  </tr>
</table>

```

CSS:

```

/* My code */
body {
  padding: 1%;
}

h2 {
  border-top: 2px solid black;
  padding-top: 1%;
}

```

Script:

```
<!-- My script -->
<script>
    // Exercise 1: Filter the list of inventors for those who were born
in the 1500's
    const fifteenTable = document.getElementById('fifteen-table');
    fifteen.forEach(inventor => {
        const row = document.createElement('tr');
        row.innerHTML = `<td>${inventor.first}</td><td>${
inventor.last}</td><td>${inventor.year}</td><td>${inventor.passed}</
td>`;
        fifteenTable.appendChild(row);
    });

    // Exercise 2: Give us an array of the inventors first and last
names
    const fullNameTable = document.getElementById('full-name-table');
    fullName.forEach(name => {
        const row = document.createElement('tr');
        row.innerHTML = `<td>${name}</td>`;
        fullNameTable.appendChild(row);
    });

    // Exercise 3: Sort the inventors by birthdate, oldest to youngest
    const birthdateTable = document.getElementById('birthdate-table');
    birthdate.forEach(inventor => {
        const row = document.createElement('tr');
        row.innerHTML = `<td>${inventor.first}</td><td>${
inventor.last}</td><td>${inventor.year}</td><td>${inventor.passed}</
td>`;
        birthdateTable.appendChild(row);
    });

    // Exercise 4: How many years did all the inventors live all
together?
    const totalYearsTable = document.getElementById('total-years-
table');
    const row = document.createElement('tr');
    row.innerHTML = `<td>${totalYears}</td>`;
    totalYearsTable.appendChild(row);

    // Exercise 5: Sort the inventors by years lived
    const yearsLivedTable = document.getElementById('years-lived-
table');
    yearsLived.forEach(inventor => {
        const row = document.createElement('tr');
```

```

        row.innerHTML = `<td>${inventor.first}</td><td>${inventor.last}</td><td>${inventor.year}</td><td>${inventor.passed}</td>`;
        yearsLivedTable.appendChild(row);
    });

    // Exercise 6: Please see the instructions in the HTML code comment.

    // Exercise 7: Sort the people alphabetically by last name
    const lastNameTable = document.getElementById('last-name-table');
    lastName.forEach(name => {
        const row = document.createElement('tr');
        row.innerHTML = `<td>${name}</td>`;
        lastNameTable.appendChild(row);
    });

    // Exercise 8: Sum up the instances of each transportation type
    const transportationTable =
document.getElementById('transportation-table');
    for (const item in transportation) {
        const row = document.createElement('tr');
        row.innerHTML = `<td>${item}</td><td>${transportation[item]}</td>`;
        transportationTable.appendChild(row);
    }
</script>

```

As an extra feature, I have added HTML code which provides sections for each exercise using <h2> headings. Within each exercise section, I included a <h3> heading to represent the exercise question. I created a <table> element with a unique id for each exercise, allowing me to target and populate the table with results.

In the JavaScript code, I used document.getElementById() to retrieve each table element by its id. I then performed the necessary operations for each exercise and added rows to the respective tables to display the results:

- For Exercise 1, I iterated over the fifteen array and created a new row in the fifteen-table for each inventor, displaying their first name, last name, birth year, and death year.
- For Exercise 2, I iterated over the fullName array and added a row to the full-name-table for each inventor, displaying their full name.
- For Exercise 3, I populated the birthdate-table with the inventors' information, similar to Exercise 1, but sorted them by birthdate from oldest to youngest.

- For Exercise 4, I added a single row to the total-years-table to display the total number of years lived by all the inventors.
- For Exercise 5, I populated the years-lived-table with the inventors' information, similar to Exercise 1, but sorted them by the number of years lived.
- For Exercise 6, I included a comment in the HTML code instructing the user to copy and paste the provided code into the console of a specific Wikipedia page to see the results. The code for Exercise 6 is not included in the JavaScript section.
- For Exercise 7, I iterated over the lastName array and added a row to the last-name-table for each person, displaying their full name.
- For Exercise 8, I looped over the transportation object, retrieved each transportation type and its corresponding count, and added a row to the transportation-table to display the instances of each transportation type.

By including these HTML, CSS, and JS code additions, I made the exercises visually presentable, allowing users to see the results of each exercise that I have made in this challenge.