What I have added

HTML:

<h2>Exercise 1: Check if at Least One Person is 19 Years or Older</h2>

  <h3>Question: Is at least one person 19 or older?</h3>

  <table id="is-adult-table">

    <tr>

      <th>Result</th>

    </tr>

  </table>

  <h2>Exercise 2: Check if Everyone is 19 Years or Older</h2>

  <h3>Question: Is everyone 19 or older?</h3>

  <table id="all-adults-table">

    <tr>

      <th>Result</th>

    </tr>

  </table>

  <h2>Exercise 3: Find a Comment with ID 823423</h2>

  <h3>Question: Find the comment with the ID of 823423</h3>

  <table id="find-comment-table">

    <tr>

      <th>Comment Text</th>

      <th>Comment ID</th>

    </tr>

  </table>

  <h2>Exercise 4: Find Index of Comment with ID 823423 and Delete it</h2>

  <h3>Question: Find the comment with the ID of 823423 and delete it</h3>

  <table id="delete-comment-table">

    <tr>

      <th>Comment Text</th>

      <th>Comment ID</th>

    </tr>

  </table>

CSS:

table {

      border-collapse: collapse;

      width: 100%;

    }

    th, td {

      border: 1px solid #ddd;

      padding: 8px;

      text-align: left;

    }

    body {

      padding: 1%;

    }

    h2 {

      border-top: 2px solid black;

      padding-top: 1%;

    }

Script:

const people = [

    { name: 'Wes', year: 1988 },

    { name: 'Kait', year: 1986 },

    { name: 'Irv', year: 1970 },

    { name: 'Lux', year: 2015 }

  ];

  const comments = [

    { text: 'Love this!', id: 523423 },

    { text: 'Super good', id: 823423 },

    { text: 'You are the best', id: 2039842 },

    { text: 'Ramen is my fav food ever', id: 123523 },

    { text: 'Nice Nice Nice!', id: 542328 }

  ];

  // Exercise 1: Check if at least one person is 19 or older

  const isAdultResult = people.some(person => ((new Date()).getFullYear()) - person.year >= 19);

  displayResult("is-adult-table", isAdultResult);

  // Exercise 2: Check if everyone is 19 or older

  const allAdultsResult = people.every(person => ((new Date()).getFullYear()) - person.year >= 19);

  displayResult("all-adults-table", allAdultsResult);

  // Exercise 3: Find a comment with ID 823423

  const foundComment = comments.find(comment => comment.id === 823423);

  displayComment("find-comment-table", foundComment);

  // Exercise 4: Find index of comment with ID 823423 and delete it

  const indexToDelete = comments.findIndex(comment => comment.id === 823423);

  const deletedComment = comments.splice(indexToDelete, 1)[0];

  displayComment("delete-comment-table", deletedComment);

  function displayResult(tableId, result) {

    const table = document.getElementById(tableId);

    const row = document.createElement('tr');

    row.innerHTML = `<td>${result}</td>`;

    table.appendChild(row);

  }

  function displayComment(tableId, comment) {

    const table = document.getElementById(tableId);

    const row = document.createElement('tr');

    if (comment) {

      row.innerHTML = `<td>${comment.text}</td><td>${comment.id}</td>`;

    } else {

      row.innerHTML = `<td>No comment found</td><td></td>`;

    }

    table.appendChild(row);

  }

}  </script>

As an extra feature, I have added HTML code that introduces structured sections for each exercise using <h2> headings. Within each exercise section, a <h3> heading which represents the exercise question. I have added a <table> element with a unique id for each exercise, providing dedicated spaces to display the results.

* **Exercise 1:** Checked if at least one person is 19 or older. The result was added to the "is-adult-table."
* **Exercise 2:** Checked if everyone is 19 or older. The result was added to the "all-adults-table."
* **Exercise 3:** Found a comment with the ID of 823423. The comment text and ID were displayed in the "find-comment-table."
* **Exercise 4**: Found the index of the comment with the ID of 823423, deleted it from the original array, and displayed the comment details in the "delete-comment-table."

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.

## Update

Because I have received feedback from my teachers that it wasn’t clear what I have done in this exercise, I have made some changes to the code.

The HTML within the body has been removed and is now provided by my script.

CSS:

pre {

      background-color: #f4f4f4;

      padding: 10px;

      border-radius: 5px;

      border: 1px solid #ddd;

      text-align: justify;

      height: fit-content;

      font-size: 1vw;

    }

I have added the pre attribute to my CSS as I am going to use it to display certain titles.

Script

// Exercise 1: Check if at least one person is 19 or older

    const isAdultResult = people.some(person => ((new Date()).getFullYear()) - person.year >= 19);

    displayExercise(

      1,

      "Is at least one person 19 or older?",

      people,

      isAdultResult,

      "people.some(person => ((new Date()).getFullYear()) - person.year >= 19)",

      "people"

    );

    // Exercise 2: Check if everyone is 19 or older

    const allAdultsResult = people.every(person => ((new Date()).getFullYear()) - person.year >= 19);

    displayExercise(

      2,

      "Is everyone 19 or older?",

      people,

      allAdultsResult,

      "people.every(person => ((new Date()).getFullYear()) - person.year >= 19)",

      "people"

    );

    // Exercise 3: Find a comment with ID 823423

    const foundComment = comments.find(comment => comment.id === 823423);

    displayExercise(

      3,

      "Find the comment with the ID of 823423",

      comments,

      foundComment,

      "comments.find(comment => comment.id === 823423)",

      "comments"

    );

    // Exercise 4: Find index of comment with ID 823423 and delete it

    const indexToDelete = comments.findIndex(comment => comment.id === 823423);

    const deletedComment = comments.splice(indexToDelete, 1)[0];

    displayExercise(

      4,

      "Find the comment with the ID of 823423 and delete it",

      comments,

      deletedComment,

      "const indexToDelete = comments.findIndex(comment => comment.id === 823423);\ncomments.splice(indexToDelete, 1)[0];",

      "comments"

    );

    function displayExercise(exerciseNumber, question, array, result, answer, arrayName) {

      const exerciseContainer = document.createElement('div');

      const h2 = document.createElement('h2');

      h2.textContent = `Exercise ${exerciseNumber}`;

      const h3 = document.createElement('h3');

      h3.textContent = `Question: ${question}`;

      const arrayDisplay = document.createElement('pre');

      arrayDisplay.textContent = `Array ${arrayName ? `(${arrayName}):` : ':'} ${JSON.stringify(array, null, 2)}`;

      const resultDisplay = document.createElement('pre');

      resultDisplay.textContent = `Result: ${result}`;

      const answerDisplay = document.createElement('pre');

      answerDisplay.textContent = `Answer:\n${answer}\n\nExplanation:\n${explainAnswer(answer, array, arrayName)}`;

      exerciseContainer.appendChild(h2);

      exerciseContainer.appendChild(h3);

      exerciseContainer.appendChild(arrayDisplay);

      exerciseContainer.appendChild(resultDisplay);

      exerciseContainer.appendChild(answerDisplay);

      document.body.appendChild(exerciseContainer);

    }

    function explainAnswer(answer, array, arrayName) {

      switch (answer) {

        case "people.some(person => ((new Date()).getFullYear()) - person.year >= 19)":

          return `The 'some' method checks if at least one element in ${arrayName} satisfies the condition of being 19 or older.`;

        case "people.every(person => ((new Date()).getFullYear()) - person.year >= 19)":

          return `The 'every' method checks if every element in ${arrayName} satisfies the condition of being 19 or older.`;

        case "comments.find(comment => comment.id === 823423)":

          return `The 'find' method is used to find a comment in ${arrayName} with the ID of 823423.`;

        case "const indexToDelete = comments.findIndex(comment => comment.id === 823423);\ncomments.splice(indexToDelete, 1)[0];":

          return `The 'findIndex' method is used to find the index of a comment in ${arrayName} with the ID of 823423. Then, the 'splice' method is used to remove the comment from the array.`;

        default:

          return "";

      }

    }

Instead of dynamically updating tables, I’ve introduced a more dynamic way of displaying results by creating a displayExercise function. Each exercise is displayed in a separate div container with headings for exercise number, question, array display, result display, and answer display. The code for each exercise is now organized within the displayExercise function, making it more modular and easier to understand. The explainAnswer function provides explanations for each exercise. The explanation for each exercise now includes additional details on the purpose and usage of the array method used in the exercise.

Overall, the changes I have made improved the readability and presentation of the code, making it more user-friendly and providing detailed explanations for each exercise.