DWA_03.4 Knowledge Check_DWA3.1

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1. Please show how you applied a Markdown File to a piece of your code.

```
## Challenge Topics 🎯
The challenges cover a range of fundamental JavaScript topics, including:

- Variables and data types 💡
- Operators and expressions ➕
- Conditional statements ❓
- Loops 🔁
- Functions 🔢
```

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2. Please show how you applied JSDoc Comments to a piece of your code.

```
/**
 * Represents the first name of the user.
 * @type {string}
 */
const user = 'John';
console.log(user)
```

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3. Please show how you applied the @ts-check annotation to a piece of your code.

```
//@ts-check
/**
 * Represents the first name of the user.
```

```
 * @type {string}
 */
const user = 'John';
console.log(user)
```

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4. As a BONUS, please show how you applied any other concept covered in the 'Documentation' module.

```
//Returns number of days in the current month
/**

Returns the number of days in a given month.
@param {Date} date - The input date.
@returns {number} - The number of days in the month of the given date.
*/
const getDaysInMonth = (date) => {
  const year = date.getFullYear(); // Get year as a four-digit number
(yyyy) - Extract the year from the date
  const month = date.getMonth() + 1; // Extract the month from the date +
1 to get the actual month
  return new Date(year, month, 0).getDate(); // Create a new date object
for the last day of the given month and year, then extract the day of the
month (i.e., the number of days in the month)
  };
```

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