

# 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.

I converted the code to Markdown using the "Markdown All in One" plugin in Visual Studio Code. The plugin automatically added syntax highlighting and a preview of the Markdown file in the editor.

```
```javascript
// This is a JavaScript code snippet to find the maximum element in an
array

function findMaxElement(arr) {
    /**
     * Finds the maximum element in an array.
     *
     * @param {Array} arr - The input array.
     * @returns {*} The maximum element in the array.
     */
    let max = arr[0];
    for (let i = 1; i < arr.length; i++) {
        if (arr[i] > max) {
            max = arr[i];
        }
    }
    return max;
}
```

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

Here is my code:

```
/**
 * Toggles the theme of the document.
 *
 * @description Toggles the theme of the document between dark and light.
 * @return {void}
 */
function toggleTheme() {
  const body = document.querySelector('body');
  const header = document.querySelector('.list');

  if (body.classList.contains('dark-theme')) {
    body.classList.remove('dark-theme');
    header.style.backgroundColor = '#f5f5f5';
    header.style.color = '#212121';

  } else {
    body.classList.add('dark-theme');
    header.style.backgroundColor = '#212121';
    header.style.color = '#f5f5f5';

  }
}
```

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

```
function searchBooks() {
  // @ts-check
  const titleText = titleInput.value;
  const genreText = genreSelect.value;
  const authorText = authorSelect.value;

  // filter books based on the provided parameters
  const filteredBooks = books.filter(book => {
```

```
    const titleMatch =
book['title'].toLowerCase().includes(titleText.toLowerCase()); // string
    const genreMatch =
book['genres'].includes(genreText.toLowerCase()); // string[]
    const authorMatch =
book['author'].toLowerCase().includes(authorText.toLowerCase()); // string

    return titleMatch && genreMatch && authorMatch;
});

// return the matching books
return filteredBooks;

}
```

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

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