

# 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.



## User Bank Balance

This code calculates the bank balance of a user after tax deductions and monthly expenses. The user pays tax of 12% of his salary and pays rent, food and transport and wants to see what is left over after these transactions.

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### Features

- Short code
- Minimal functionality
- Able to calculate expenses and tax deductions from salary

### Requirements

- An IDE [Visual Studio Code](#)
- Basic [HTML](#) and [JavaScript](#)
- A browser [Chrome](#)
- Formulae to calculate balance

### How it works

4. Test the code

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

```
/**
 * Add and Multiply two numbers together
 * @param {number} a - The first half of the addition/multiplication
 * @param {number} b - The second half of the addition/multiplication
 * @returns {number}
 */
const add = (a, b) => {
  return a + b;
};

const multiply = (a, b) => {
  return a * b;
};
```

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

```
JS functionExpressions.js 1 X
C: > Users > SOFTWAREDEVELOPER1 > Documents > Ontiretse SD Course 2023 > interactive-web-apps > myInteractiveWebApps > IWA14 > challenge2 > JS functionEx
1 // @ts-check
2
3 /**
4  * Add and Multiply two numbers together
5  * @param {number} a - The first half of the addition/multiplication
6  * @param {number} b - The second half of the addition/multiplication
7  * @returns {number}
8  */
9 const add = (a, b) => {
10   return a + b;
11 };
12
13 console.log(add(4, '4'));
14
```

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

```
JS representUser.js > ...
1  /**
2   * Represents a user.
3   * @typedef {Object} User
4   * @property {number} id - The user ID.
5   * @property {string} name - The user's name.
6   * @property {string} email - The user's email address.
7   */
8
9  /**
10   * Get a user by ID.
11   *
12   * @param {number} id - The user ID.
13   * @returns {User|null} The user object if found, or null if not found.
14   */
15  function getUserById(id) {
16    // Implementation details...
17  }
18
19  // API endpoint: GET /users/:id
20
21  /**
22   * Retrieves a user by ID.
23   *
24   * @param {Request} req - The request object.
25   * @param {Response} res - The response object.
26   */
27  function getUserHandler(req, res) {
28    const userId = parseInt(req.params.id);
29    const user = getUserById(userId);
30
31    if (user) {
32      res.json(user);
33    } else {
34      res.status(404).json({ error: 'User not found' });
35    }
36  }
```

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