**Describe the specific code segments you plan to modularize into functions. Explain what each function will do and whether it will have parameters, arguments, or return values.**

For most of my code I already used functions but one of the main segments I plan to make into functions is my search function, so that it can be used in multiple pages without having to duplicate my code or create multiple files. My search function will take a list of elements selected from the HTML, as well as a search word or phrase that the function will search for. The function will not return anything, as all the operations will be done inside the function.

My profile script could also benefit from having more functions, as right now the code isn't in any functions. So this means creating the following functions: A function that gets user input and returns it to be displayed in the HTML, a function that takes the user's frost date and calculates how many days till that date, and returns it to be displayed to the user and a function that checks if a user has a saved username, else it prompts the user to enter a username. This breaks the script into logical segments as the code does such different things.

**Discuss why you chose to convert these sections into functions. Focus on how modularization improves your code's readability, reduces repetition, and simplifies debugging or future updates.**

I choose to convert the search to a function to improve the code structure as well as reduce the need for repetition, as I plan to implement a search function in other pages. For the profile script it breaks the large code body into logical segments by organizing it into multiple functions improving the readability and simplifying the flow.

**Propose any new functions that could enhance your site's features or improve user interaction. For each new function, describe its purpose, what parameters it will take, whether it will return a value, and how it fits into your overall project.**

Other functions would be to order plants based on a selected type (type, A-Z, growing season). The three functions would take the plant list and as a parameter, it would then traverse the plant list ordering the plants based on the type, and then return the ordered list to be displayed to the user. This would make my website more user friendly and fits with other functionalities I've used. This would be implemented for my plant database page in the existing plant_database.js file.