I will provide you with a Python function, method, or keyword, (as well as detailed information about each one) and you will formulate a question that prompts the user (of the flashcards) to associate a terms real-world usage with the term itself thereby improving my ability to recall and utilize terms effectively when writing code. The question should not provide examples- just a concise, open-ended question that requires the user to recall the appropriate term based on the described use case or scenario. This will reinforce memorization and association of the terms with their applications. Make sure that for each term, you are careful not to use self-referential wording in the question you produce for a term. Self-referential wording is when you a variation of the term in the question you generate. Let's use the sort() method for example. Because "sort()" is the term, you want to avoid using any variations of the word "sort" in your question (sort, sorted, sorting, sorter, etc). This will force the user (of the cards) to know the name of each term by memory, since the name of the term won't be indicated anywhere in the question. This will reinforce memorization and association of the terms with their applications.

Let's look at an example of a question that includes self-referential terms, and then I will show you what it would look like if it was correctly phrased. Suppose I send you this description of the insert() method so you can formulate a question:

[My term: "The insert() method inserts an 'element' at a specified 'index' position in a list. *The insert() method:* • Is a method of the list class. • Modifies the original list. • Accepts TWO arguments: # list.insert(index, element) [index] The index position in the list where the new element should be inserted. [element] The object to be inserted into the list."]

And suppose that this is your response:

[Your response: "You have a list in Python, and you need to insert a new element at a specific position within that list, shifting the existing elements to make room for the new one. What method would you use to modify the original list by inserting the new element at the desired index?"]

The question you created is specific enough that the qualities described help the user to differentiate between different terms, but the error is in the self-referential wording. In this scenario, you've used the word "inserting" in a question about the insert() method which makes

it far too obious what the answer is. "Inserting" is a variation of the word "insert" and clues the user into the name of the term, instead of challenging them to remember the name without any clues available. Here's a modified version of "your response" with the issues I just mentioned, corrected:

[Your corrected response: "You have a list, and you need to add a new element at a specific position within that list, shifting the existing elements to make room for the new one. What method would you use to modify the original list by adding the new element at the desired index?"]

This corrected phrasing manages to be specific enough to the function without making any self-references to it in the question itself. Let's look at another example together. Suppose I'm giving you information about the update() method so that you can come up with a question:

[my input: The update() method updates a dictionary with the elements from another dictionary object, from an iterable of 'key-value pairs', or from a singular key:value pair. *The update() method:* • Is a method of the dict class. • Modifies the original dictionary. • Accepts ONE argument: # dict_1.update(key_value_pairs) [key_value_pairs] The dictionary or iterable of key-value pairs to update dict_1 with.]

And your response is:

[your response: You have a dictionary in Python, and you need to add new key-value pairs or update existing ones based on data from another dictionary or an iterable of key-value pairs. What method would you use to modify the original dictionary by merging or updating its contents with the provided key-value pairs?]

The reason "your response" was wrong is because you used the word "updating" in the question you produced about the update() method. You may not use self-referential variations of the term "update" (update, updated, updating, etc) in the question because it clues the user to the fact that the term is titled "get()" which doesn't effectively challenge the user to remember term

names directly from memory instead of from clues. Here's the corrected output which fixes the issue which I've just explained to you:

[your corrected response: You have a dictionary in Python, and you need to incorporate new key-value pairs into it based on data from another dictionary or an iterable. What method would you use to modify the original dictionary by merging it with the provided key-value pairs?]

Notice how there are no variations of the word "update" used in the question referring to the update() method, meaning that the question is now correctly worded and ready to be placed on a flashcard!

In summary, you understand now that when formulating flashcard questions about Python methods, functions or keywords, you must:

1. Avoid any self-referential wording (using variations of the term word) that could give away the answer. This includes not using the name of the method/function itself in the question.
2. Phrase the question in an open-ended way that requires the user to deduce the appropriate term from the described use case or scenario.
3. Provide just a concise question without any additional context clues (example: self-referential wording, etc.) beyond describing the practical application of the term.
4. Focus the question on prompting the user to associate the terms real-world usage when writing code with the term itself, improving my ability to recall and utilize terms effectively when writing code without having to look at my notes.
5. Use synonyms or completely rephrase the description to avoid any obvious references to the term itself (Example: Term = find(). Question includes words like: "find", "finding", "found", etc.)
6. Ensure that the question captures the full functionality of the term (it's parameters, return object, etc)

And last but not least, Happy flashcard production! :)