

Question 1

Review the following code:

```
my_list = ["a", "b", "c", "d"]  
my_list[2] = 4  
print(my_list)
```

What will it display? 1 / 1 point

An error message

["a", 4, "c", "d"]

["a", "b", 4, "d"]

["a", "b", "4", "d"]

Correct

The code will display ["a", "b", 4, "d"]. It reassigns the my_list element at index 2. This is the third element in the list, so "c" is replaced by the integer 4.

Question 2

You are working with the list ["cwvQSQ", "QvPvX5", "ISyT3a", "S7vgN0"]. Its elements represent machine IDs, and the list is stored in a variable named machine_ids. Which line of code will add the ID of "yihhLL" at index 3? 1 / 1 point

machine_ids.insert("yihhLL",3)

machine_ids.insert(3,"yihhLL")

machine_ids.append("yihhLL")

machine_ids.append("yihhLL",3)

Correct

The code machine_ids.insert(3,"yihhLL") will add the ID of "yihhLL" at index 3. The .insert() method adds an element in a specific position inside a list. It takes in two parameters. The first indicates the index where you want to add a new element, and the second indicates the element you want to add.

Question 3

Which line of code will remove the username "tshah" from the following list?

access_list = ["elarton", "bmoreno", "tshah", "sgilmore"] 1 / 1 point

access_list.remove(3)

access_list.remove("tshah")

access_list.remove(2)

access_list["tshah"].remove()

Correct

The code access_list.remove("tshah") will remove the username "tshah" from the list. The .remove() method removes the first occurrence of a specific element in a list. It takes the element to be removed as its argument, so access_list.remove("tshah") removes the username "tshah".

Question 4

As a security analyst, you are responsible for developing an algorithm that automates removing usernames that match specific criteria from an access list. What Python components would help you implement this? Select three answers. 1 / 1 point

The `.remove()` method

Correct

The algorithm should iterate through the usernames in an access list. On each iteration, it should check whether the current username matches the specific criteria and remove it when it does. The `.remove()` method removes the first occurrence of the usernames that match the criteria.

The `.append()` method

A for loop that iterates through the usernames in the access list

Correct

The algorithm should iterate through the usernames in an access list. On each iteration, it should check whether the current username matches the specific criteria and remove it when it does. The for loop iterates through the usernames in the access list.

An if statement that compares a username to the criteria for removal

Correct

The algorithm should iterate through the usernames in an access list. On each iteration, it should check whether the current username matches the specific criteria and remove it when it does. The if statement checks if the current username matches the specific criteria.