

Scenario

As a security analyst, you are responsible for managing access to restricted content within an organization. The current access is controlled through an "allow list" that contains IP addresses authorized to access specific resources. Your task is to develop an algorithm to update this list and automate the removal of IP addresses that no longer have access.

You are provided with a file named `allow_list.txt` containing a list of IP addresses, each on a new line, that are currently allowed access. Additionally, you have a list called `remove_list` containing IP addresses that should be removed from this allow list.

Your goal is to write a Python script that parses the `allow_list.txt` file, removes the IP addresses present in the `remove_list`, and updates the file with the remaining authorized IP addresses.

The final script should:

- Read and parse the IP addresses from `allow_list.txt`.
- Remove any IP addresses found in the `remove_list`.
- Update the `allow_list.txt` file by writing back only the IP addresses that still have access.

Additionally, ensure that the program handles potential errors, such as missing files or incorrect IP address formats, and confirm that the updated list of allowed IP addresses is correctly written back to the file.