

Algorithm for file updates in Python

Project description

In this project, I will open a file, read the contents, convert a string into a list, remove IP addresses, and finally update the file with the correct list of IP addresses.

Open the file that contains the allow list

The first portion I completed was assigning the file name as a string.

```
# Assign import_file to the name of the file  
import_file="allow_list.txt"
```

Then to open the file...

```
# Build with statement to read initial comments of the file  
with open(import_file, "r") as file:
```

Read the file contents

To read the contents in the file, I used read()

```
ip_addresses = file.read()
```

Convert the string into a list

```
# Use `.split()` to convert `ip_addresses` from a string to a list  
ip_addresses = ip_addresses.split()
```

Remove IP addresses that are on the remove list

```
for element in remove_list:  
  
    # Create conditional statement to evaluate if `element` is in `ip_addresses`  
  
    if element in ip_addresses:  
  
        # use the `.remove()` method to remove  
        # elements from `ip_addresses`  
  
        ip_addresses.remove(element)
```

Update the file with the revised list of IP addresses

```
# Convert `ip_addresses` back to a string so that it can be written into the text file
ip_addresses = "\n".join(ip_addresses)
```