# Algorithm for file updates in Python

## Project description

In this project, I read a file that contains a list users’ IP addresses that should have admin privileges and removed users based on a list of ip addresses that are passed in as a parameter. These users may have left the company for whatever reason so their admin privileges of course need to be removed.

## Open the file that contains the allow list

To open a file I use the ‘with’ keyword. This helps open the file and check for exceptions and when the coded passes out of the with statement the file is then closed automatically for me.

I also use the ‘open’ keyword to open the file which takes 2 arguments, the file to be opened and what I will be doing with the file ie. read, write or append.

With open(admins.txt, “r”) as file:

## Read the file contents

To read the file we specify ‘r’ as the second argument. Then using the variable where I assigned the file to I used the read method of the file. I assigned this to a variable

Allowed\_users = file.read()

## Convert the string into a list

To convert the text written to allowed\_users I used the ‘split’ function.

allowed\_users.split()

This creates a new list with all of the ip addresses as elements of the list

## Iterate through the remove list and remove IP addresses

I then needed a for loop to iterate through the admins ip addresses

For address in allowed\_users:

If address in remove\_list:

allowed\_users.remove(address)

## Update the file with the revised list of IP addresses

To update the file I needed to overwrite it with my updated list of admin users. First I formatted my updated list to be written to the file by using the ‘join’ keyword with the new line operator as the parameter in how to separate each list item in the file.

Formatted\_allowed\_users = “\n”.join(allowed\_users)

I then opened the file like before, but this time passed ‘w’ as the second parameter.

With open(admins.txt, ‘w’) as file:

file.write(formatted\_allowed\_users)

Instead of file.read, this time I used file.write to overwrite the file with the new updated list of admin users

## 

## 

## Summary



