## Algorithm for file updates in Python

### Project description

In this lab, we will learn about the security rules that can be used to either allow the legitimate users or to identify/block attackers based on the IP address information. We will utilize the concepts we learnt about working with algorithms, reading and writing files, iterating through list and file and filtering the data based on some predefined criteria. This learning will further provide a basis for creating complex algorithms to deal with various security assessments and allowing/blocking the traffic.

### Open the file that contains the allow list

import\_file "allow\_list.txt"
with open (import\_file,"r") as file:

#### Read the file contents

print (file.read())

### Convert the string into a list

ip\_addresses = ip\_addresses.split()

### Iterate through the remove list

if element in remove list:

#### Remove IP addresses that are on the remove list

ip addresses.remove(element)

with open(import\_file, "w") as file:

file.write(ip\_addresses)

# Summary

In this lab, we learnt about working with writing algorithms by utilizing the concepts of list, loops, conditions, and file operations (read, writing, appending). Also we learned how the functions are utilized making the code easy to read and changes are easy to make.