1. 전체 코드

*import* re

*import* os.path

*import* sys

class LogData():

def \_\_init\_\_(self, filepath):

self.filepath=filepath

self.ips = []

def *extract\_ips*(self):

*try*:

*with* open(self.filepath, 'r') *as* file:

log\_content = file.read()

ip\_pattern = r'\d{1,3}\.\d{1,3}\.\d{1,3}\.\d{1,3}'

self.ips = re.findall(ip\_pattern, log\_content)

*except* Exception *as* e:

print(f"Error: {e}")

sys.exit()

def *frequency*(self):

self.set = set(self.ips)

self.ip\_frequency = {f'{ip}' : self.ips.count(ip) *for* ip *in* self.set}

self.ip\_frequency = sorted(self.ip\_frequency.items(), key=lambda x: x[1], reverse=True)

def *top\_3*(self):

print(self.ip\_frequency[0:3])

def *to\_csv*(self):

csv\_file = open("ip\_log.csv", 'w')

csv\_file.write('IP, Frequency\n')

*for* (ip, frequency) *in* self.ip\_frequency:

csv\_file.writelines(f"{ip},{frequency}\n")

csv\_file.close()

*if* os.path.isfile('ip\_log.csv'):

print('file save success')

*else*:

print('Fail to save')

*if* \_\_name\_\_ == '\_\_main\_\_':

filepath = input("Input log file's path: ")

log\_data = LogData(filepath)

log\_data.extract\_ips()

log\_data.frequency()

log\_data.top\_3()

log\_data.to\_csv()

1. 캡처

