Port scanner with python

# This script runs on Python 3

import socket, threading

def TCP\_connect(ip, port\_number, delay, output):

    TCPsock = socket.socket(socket.AF\_INET, socket.SOCK\_STREAM)

    TCPsock.setsockopt(socket.SOL\_SOCKET, socket.SO\_REUSEADDR, 1)

    TCPsock.settimeout(delay)

    try:

        TCPsock.connect((ip, port\_number))

        output[port\_number] = 'Listening'

    except:

        output[port\_number] = ''

def scan\_ports(host\_ip, delay):

    threads = []        # To run TCP\_connect concurrently

    output = {}         # For printing purposes

    # Spawning threads to scan ports

    for i in range(10000):

        t = threading.Thread(target=TCP\_connect, args=(host\_ip, i, delay, output))

        threads.append(t)

    # Starting threads

    for i in range(10000):

        threads[i].start()

    # Locking the main thread until all threads complete

    for i in range(10000):

        threads[i].join()

    # Printing listening ports from small to large

    for i in range(10000):

        if output[i] == 'Listening':

            print(str(i) + ': ' + output[i])

def main():

    host\_ip = input("Enter host IP: ")

    delay = int(input("How many seconds the socket is going to wait until timeout: "))

    scan\_ports(host\_ip, delay)

if \_\_name\_\_ == "\_\_main\_\_":

    main()