Project B

Information Security

Project/Assignment B of Information Security bootcamp (Python - Introduction)

You have been learning building blocks of Python programming language and now it is the time to apply those skills by implementing and using techniques to solve a real-world network security related issue, which you may face while working as a Security Professional in field.

You are hired in an organization as a security professional and your first task is to analyze a network for vulnerabilities. There are many different servers on a network, running various services, to support day to day business operations. You have been asked to gather the information about the possible vulnerabilities on any specific server

Your task is to write a Python program that should test the given host and it should generate a list of all the TCP Open ports within the range of 1 to 1025. You are required to accomplish this task by using standard Python's "socket" library. Following are the functional requirements:

1. On execution of program system should prompt "Enter a host to scan". User will provide a host name
2. System should look for all the ports between the range of 1 to 1025
3. If the Ports is open it should create a file and add an entry for port number
4. In case of any exception for instance "host is not available", "host name could not be resolved" or due to any other error you need to write that exception into same file
5. You also need to record starting and ending date and time at the beginning and ending of file accordingly. It should also show the total time it took in port scanning process

Following is the Environment:
You have a local ubuntu machine and you need to develop and execute port scanning program on this machine

Duration: 1 Weeks (20 hours)