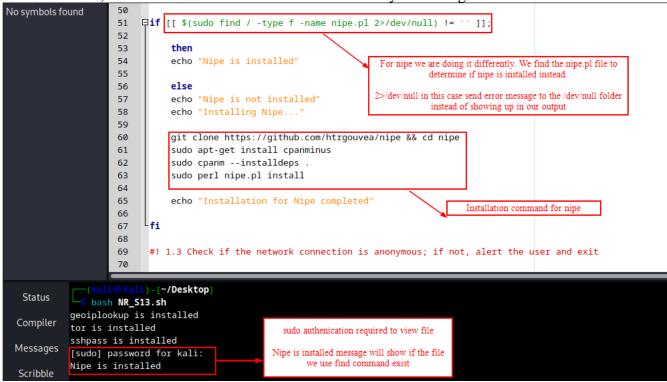
### Network Research Project – S13 Low Hong Jun

## **Objective**

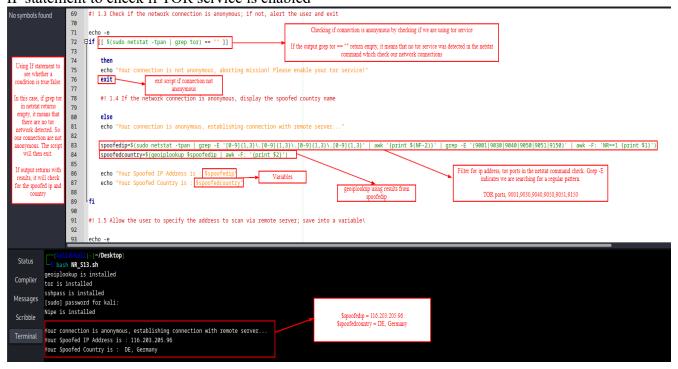
- 1. Installations and Anonymity Check
  - 1.1 Install the needed applications
  - 1.2 If the applications are already installed, don't install them again
  - 1.3 Check if the network connection is anonymous; if not, alert the user and exit
  - 1.4 If the network connection is anonymous, display the spoofed country name
  - 1.5 Allow the user to specify the address to scan via remote server; save into a variable
- 2. Automatically Connect and Execute Commands on the Remote Server via SSH
  - 2.1 Display the details of the remote server (country, IP, and Uptime)
  - 2.2 Get the remote server to check the Whois of the given address
  - 2.3 Get the remote server to scan for open ports on the given address
- 3. Results
  - 3.1 Save the Whois and Nmap data into files on the local computer
  - 3.2 Create a log and audit your data collecting

Creating a IF Statement to check if applications need to be installed 1 #!/bin/bash No symbols found 2 3 #! 1. Installations and Anonymity Check 4 5 #! 1.2 If the applications are already installed, don't install them again 6 7 app1="geoiplookup" Save application names in variables so that we 8 app2="tor" will be able to use it for our IF statement In the first scenario, 9 app3="sshpass" we will be using a IF 10 Which command to output whether command statement to check 11 **□if** [[ \$(which \$app1) != "" exist. It not installed, it will output nothing. whether a condition is Hence != " " will be true if application is 12 true or false. installed and false is not installed. Which will 13 then trigger the installation process In our case, it will be 14 echo "\$app1 is installed" whether a application 15 is install (true) and 16 else not installed (false) echo "\$app1 is not installed" 17 echo "Installing \$app1 18 command to install the 19 sudo apt-get install geoip-bin required application 20 echo "Installation for \$app1 completed 21 (kali@kali) - [~/Desktop] Status bash NR S13.sh geoiplookup is installed Message will show whether application is Compiler tor is installed installed or if installation is in progress sshpass is installed Messages [sudo] password for kali: Nipe is installed Scribble

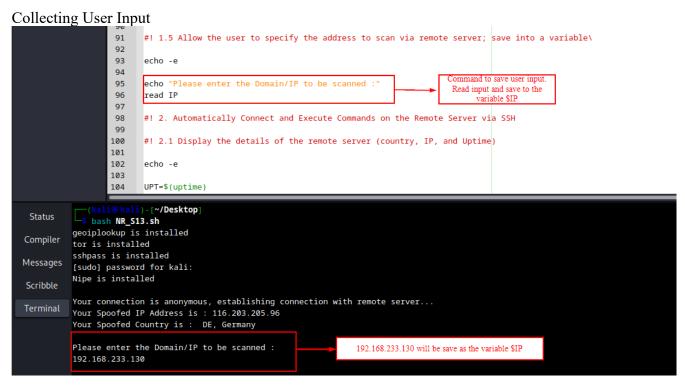
Same for NIPE, IF statement to check if NIPE file is in the system using the find command

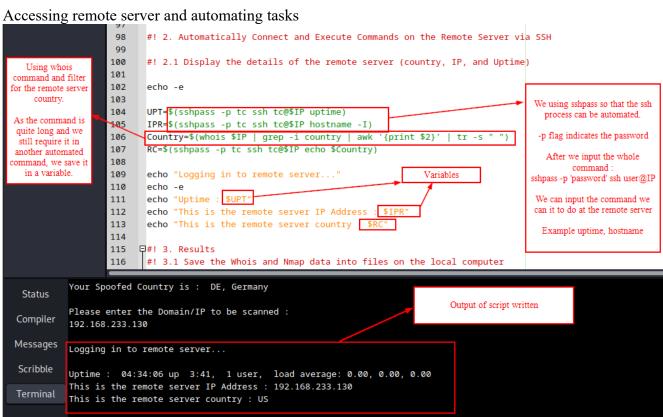


### IF statement to check if TOR service is enabled

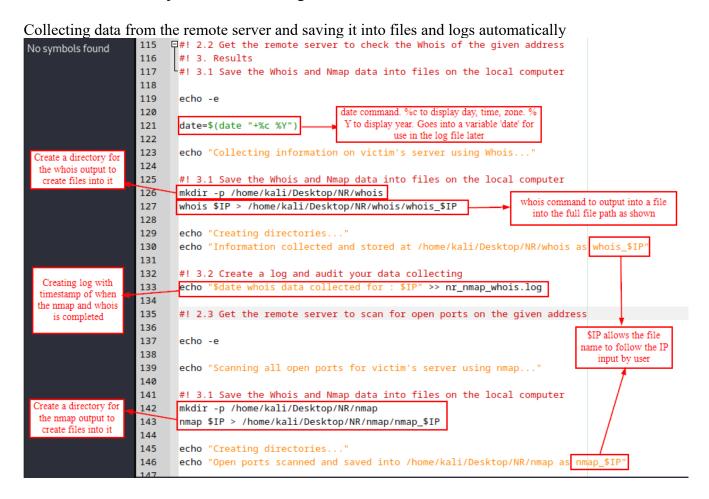


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#### Output from the above script

```
Collecting information on victim's server using Whois.
Treating directories...
                                      file path to save the files
Information collected and stored at /home/kali/Desktop/NR/whois as whois_192.168.233.130
Scanning all open ports for victim's server using nmap...
Creating directories...
                                                                  nmap $IP
Open ports scanned and saved into /home/kali/Desktop/NR/nmap as nmap_192.168.233.130
   kali®kali) - [~/Desktop]
                                                                Output from script
   -(kali⊗kali) - [~/Desktop]
                                              log that records whois and nmap data collection
     cat nr_nmap_whois.log
 Thu 12 Oct 2023 10:01:19 AM EDT 2023 whois data collected for : 192.168.233.130
 Thu 12 Oct 2023 10:01:19 AM EDT 2023 Nmap data collected for : 192.168.233.130
 Thu 12 Oct 2023 10:01:35 AM EDT 2023 whois data collected for : 192.168.233.129
 Thu 12 Oct 2023 10:01:35 AM EDT 2023 Nmap data collected for : 192.168.233.129
 Thu 12 Oct 2023 10:07:27 AM EDT 2023 whois data collected for : 192.168.233.130
 Thu 12 Oct 2023 10:07:27 AM EDT 2023 Nmap data collected for : 192.168.233.130
     (kali⊗kali) - [~/Desktop]
                                                      Timestamp of data collection recorded
```