

**PROJECT TASK 3**

**CONFIGURING SNORT IPS TO DETECT, MONITOR AND ALERT**

**CYBERSECURITY ATTACKS**

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CISSC 661: Principles of Cybersecurity & Cyberwarfare

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## Snort IPS Setup

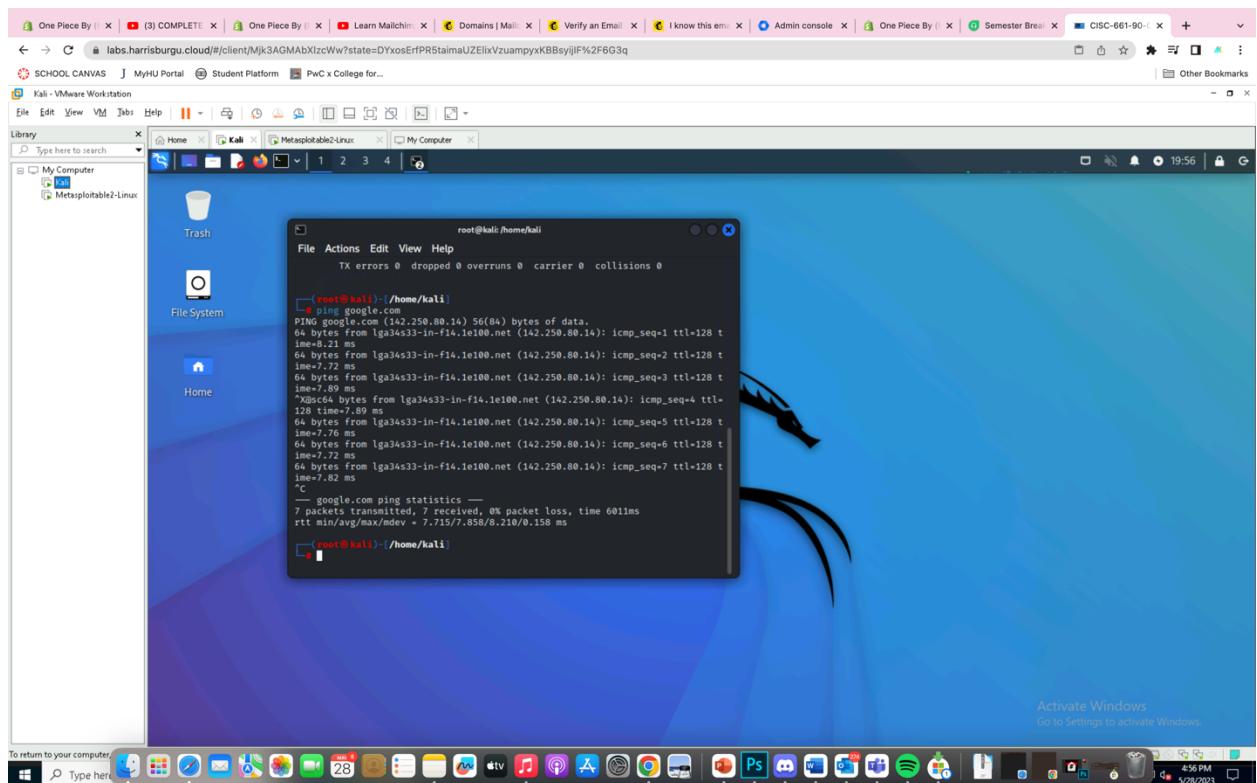
Performed a successful exploit for this project. For this project we needed Kali Linux, Metasploitable.

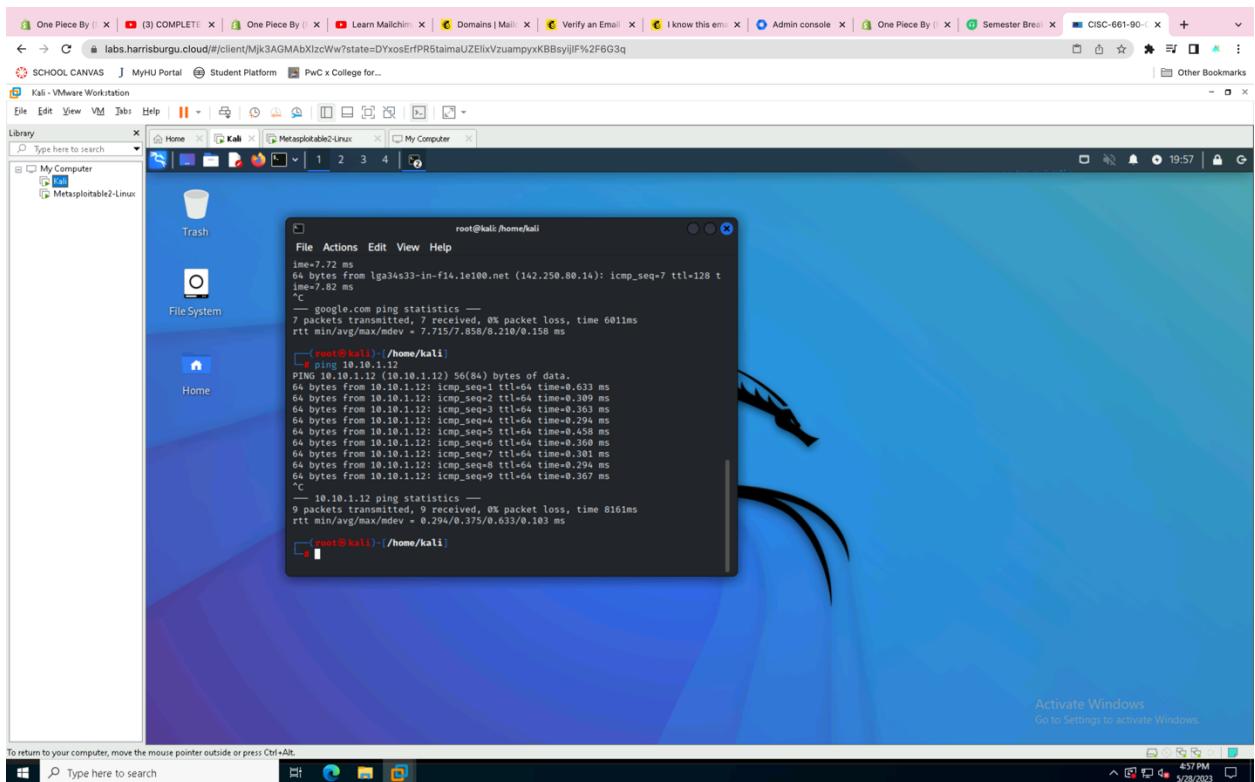
### System Configuration:

- Macbook Pro 2016
- Mac OS Ventura
- 32 GB RAM
- 2.3 GHz 8-Core Intel Core i9

### Step 1: Test for connection

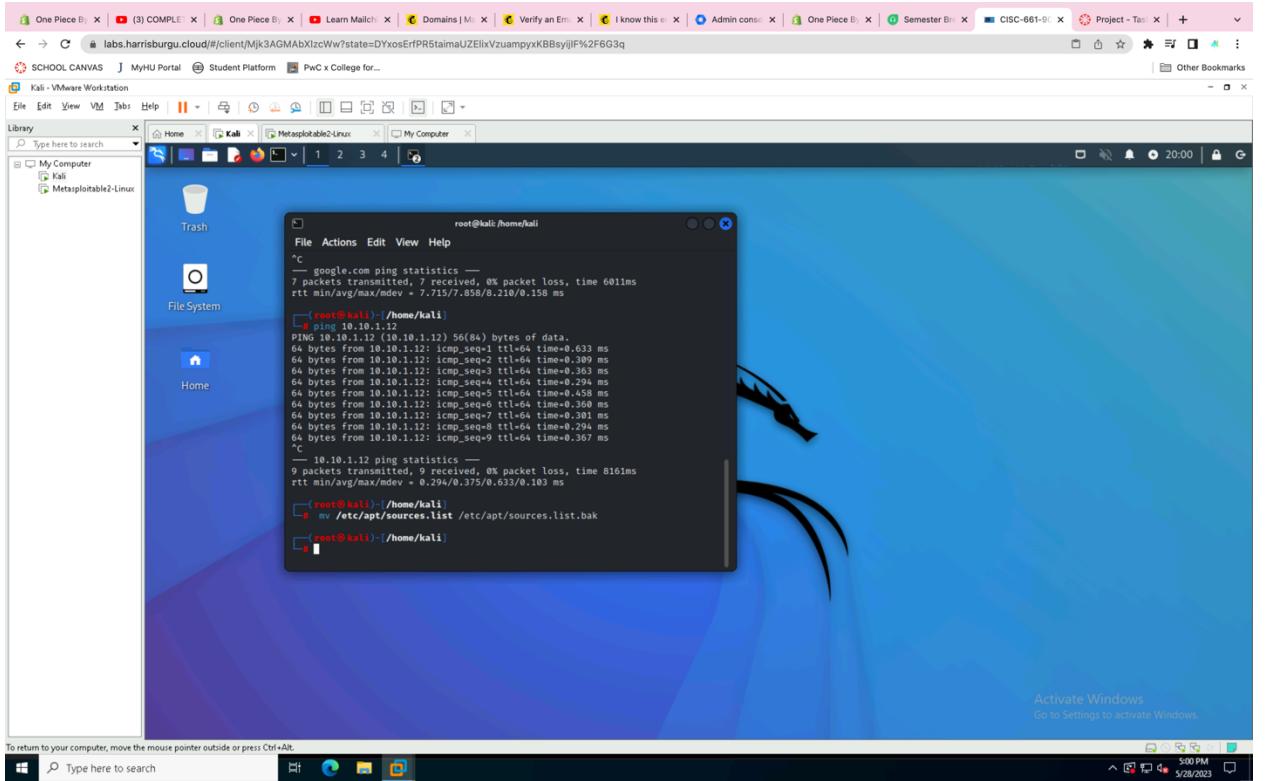
- Using Ping to test for connection.



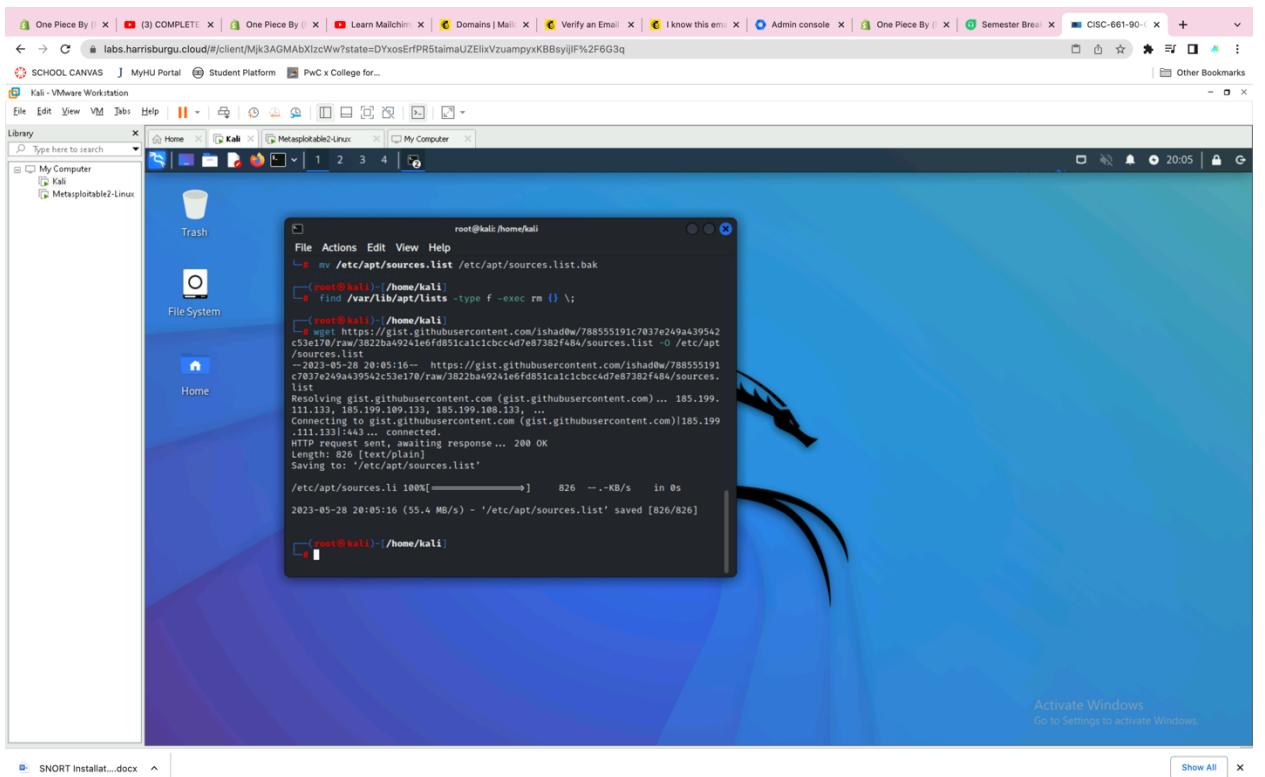


## Step 2

- Move sources list by making backup copy

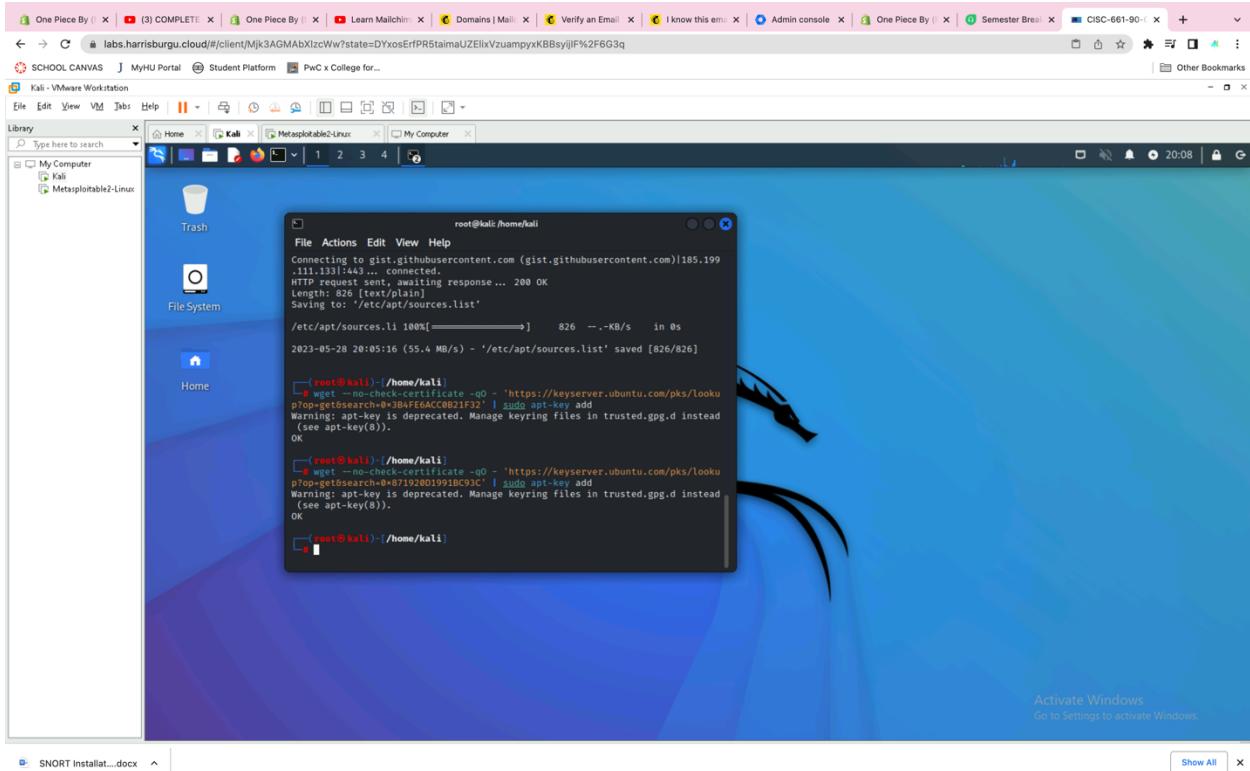


- Create certificate in place to ensure secure connection.

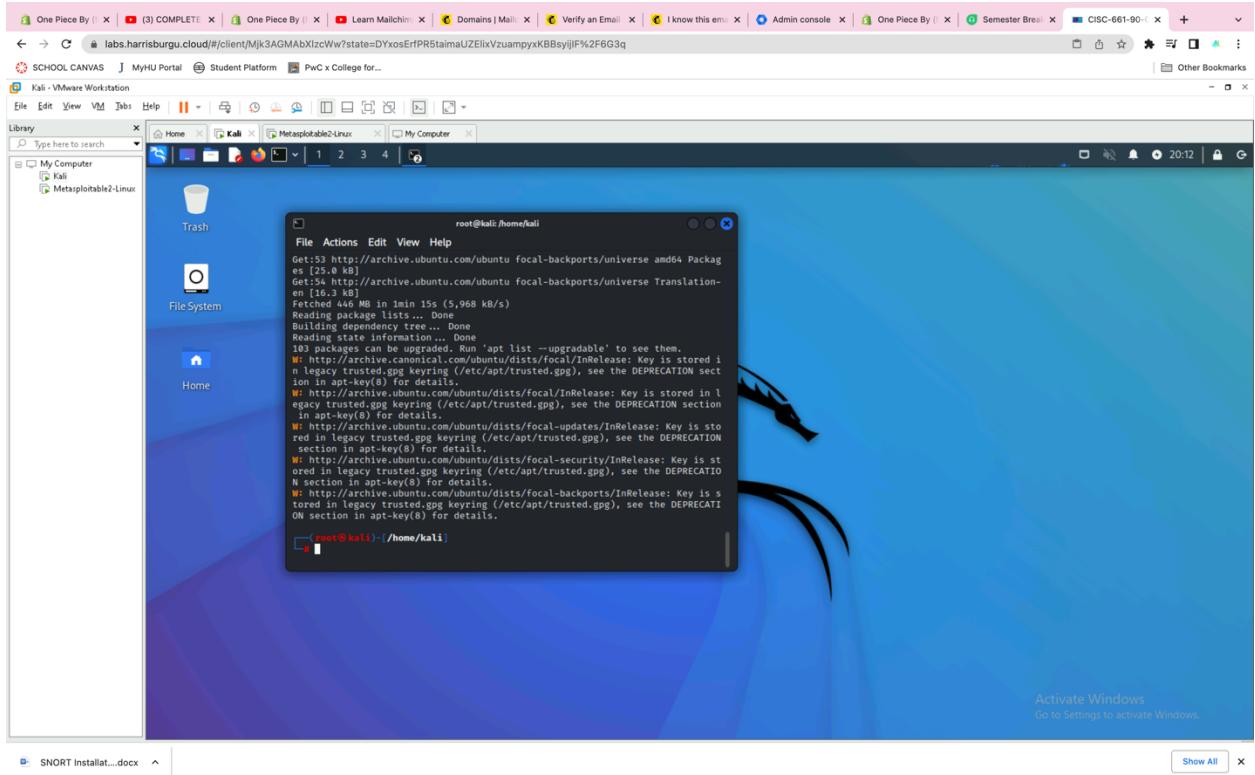


### **Step 3**

- Perform apt update

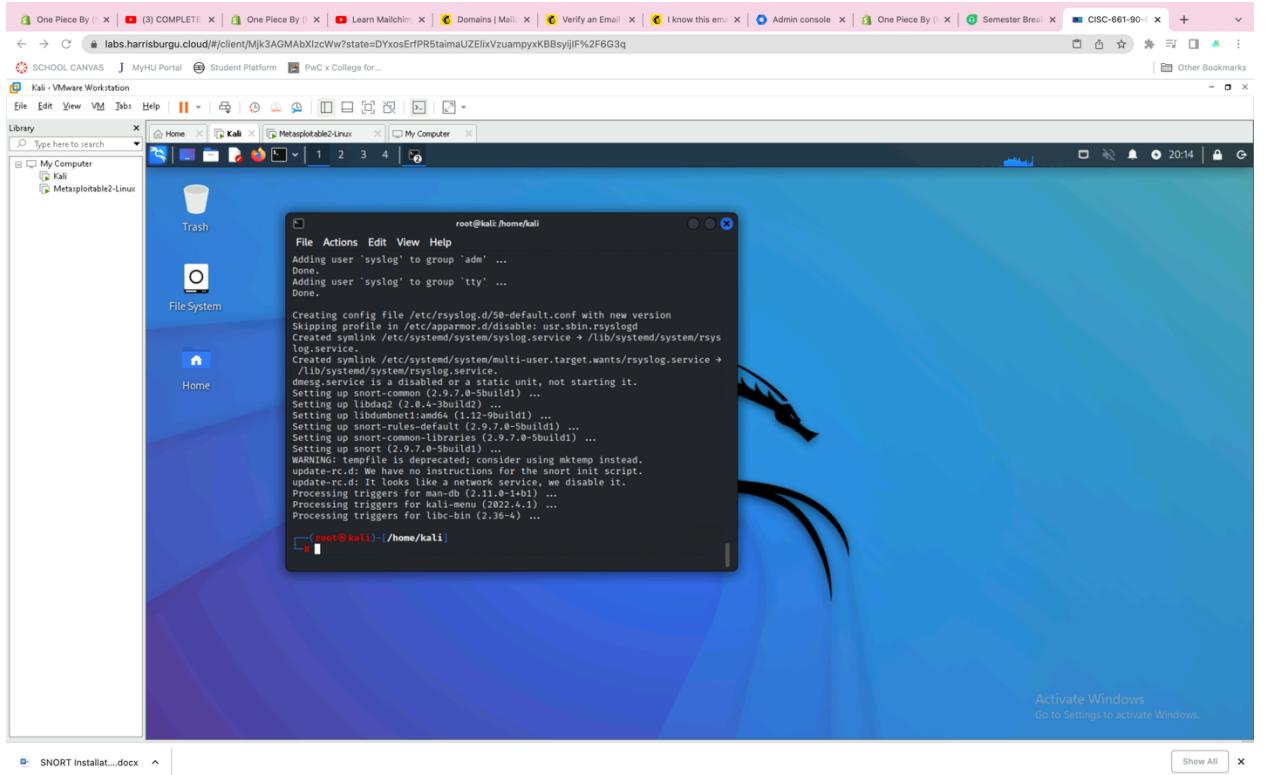


- Perform apt install snort.
  - Change default network to local network

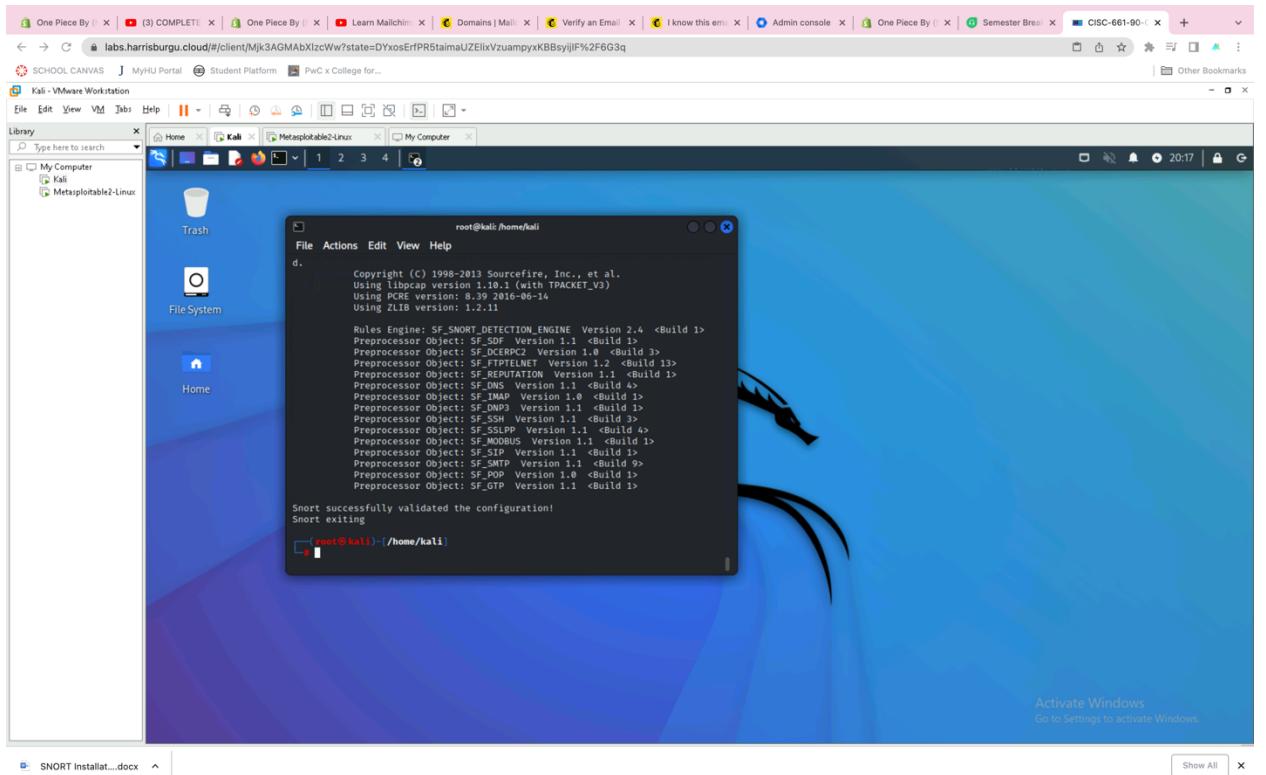


## Step 4

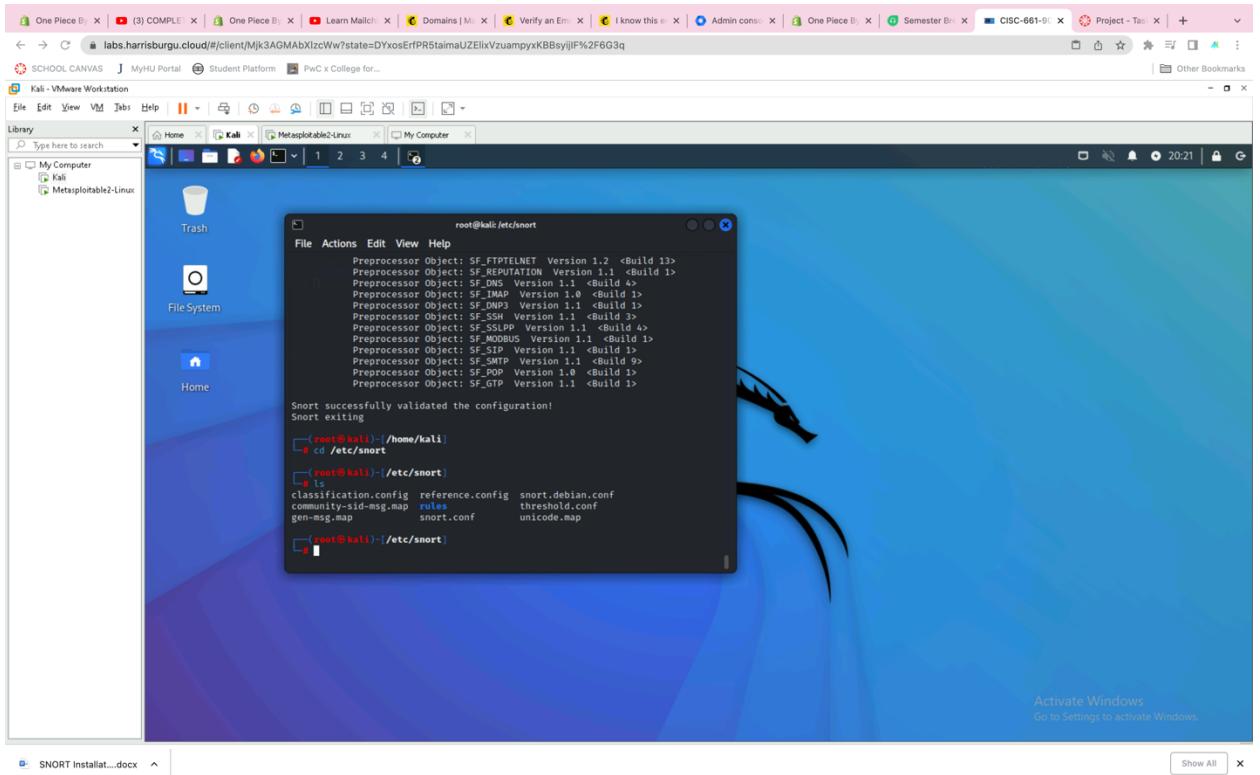
- Move sources file back to original file by overwriting.
- Test configuration



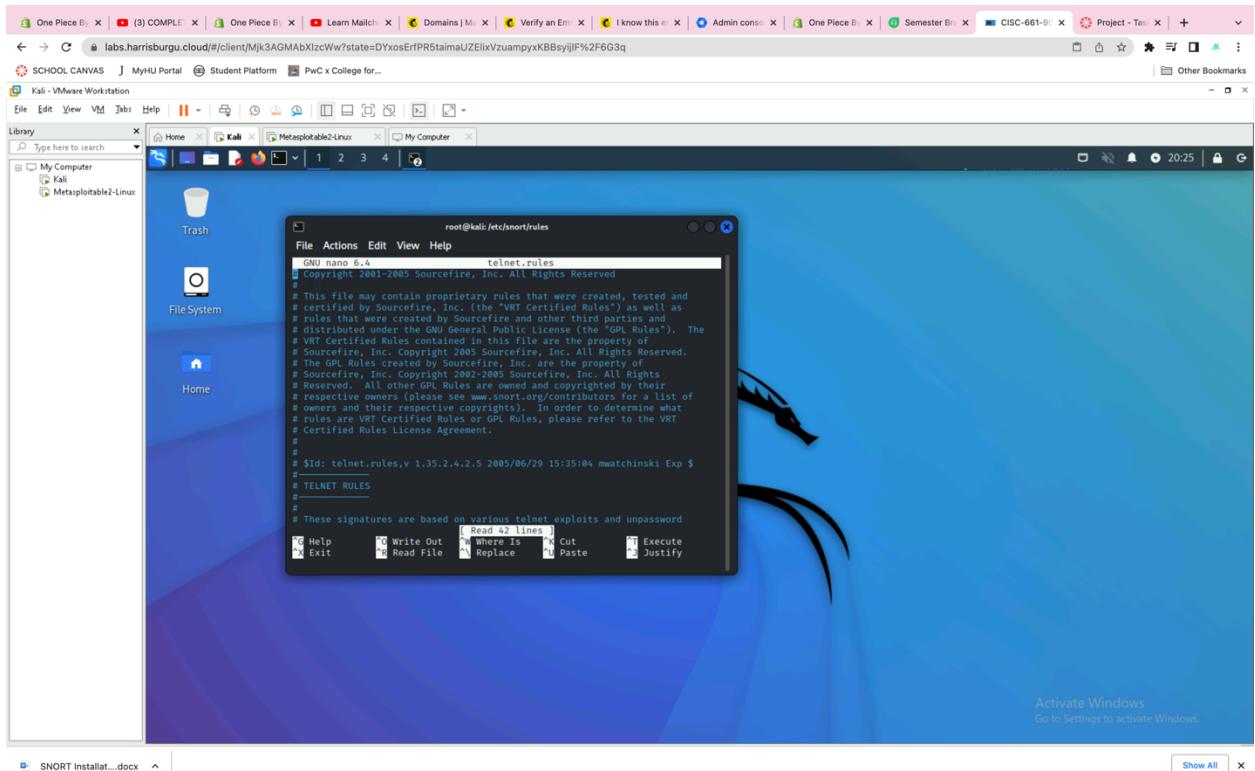
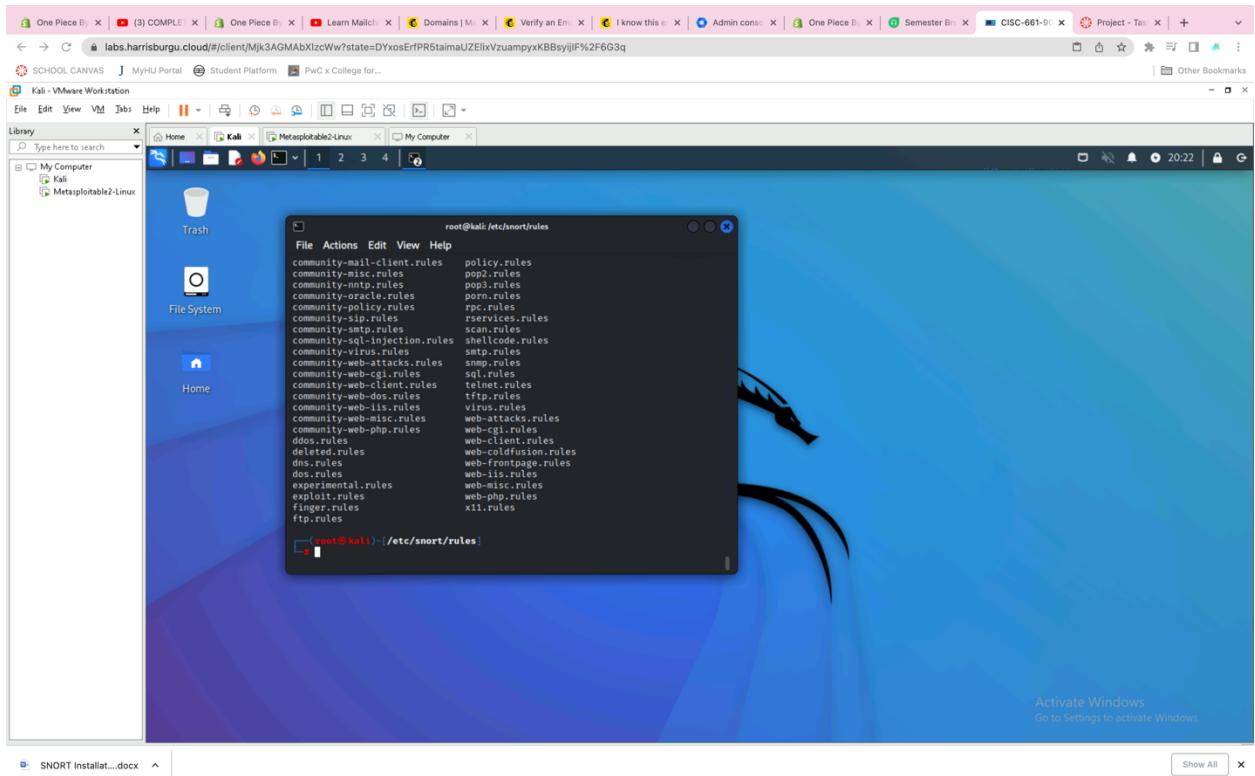
- Access directory where Snort is deployed.



- Access rules file



- Create syntax to detect activity using “telnet.rules”



- Add command rule to alert tcp

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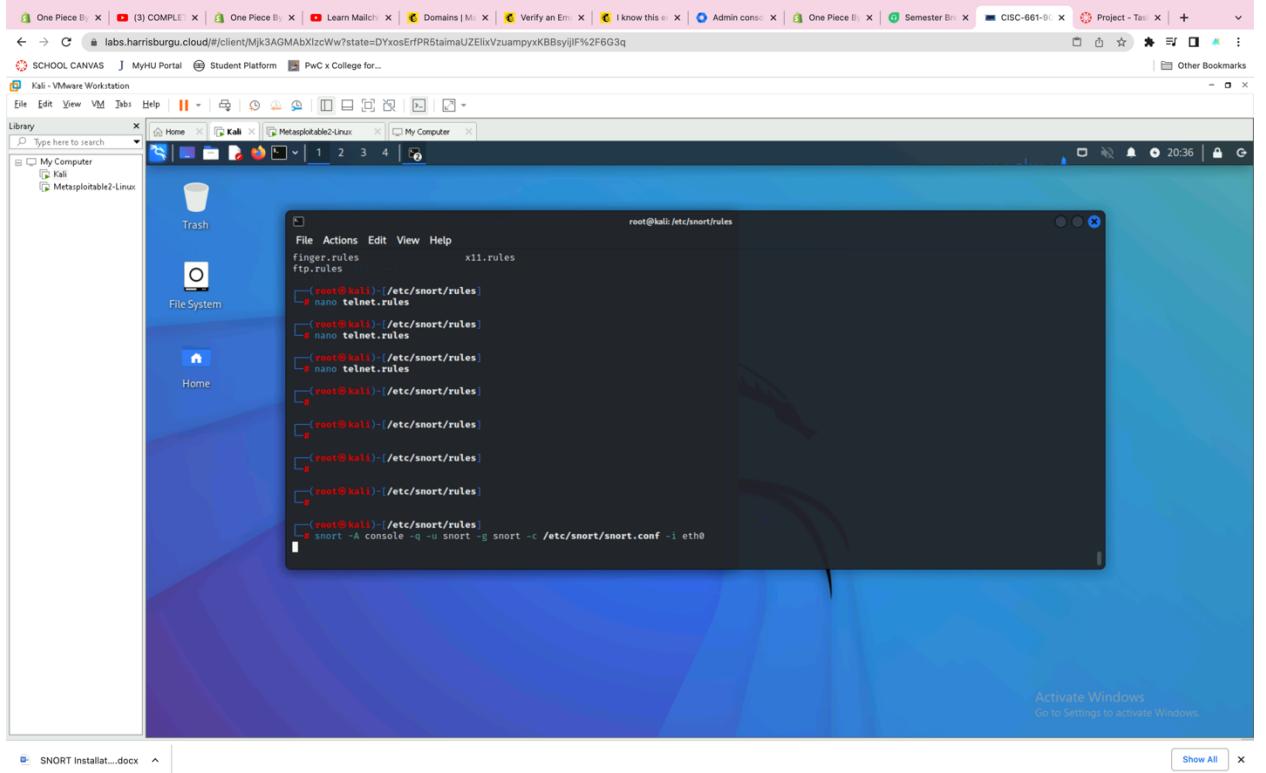
root@kali:/etc/snort/rules
GNU nano 6.4
telnet.rules

# These signatures are based on various telnet exploits and unpassworded
# protected accounts.

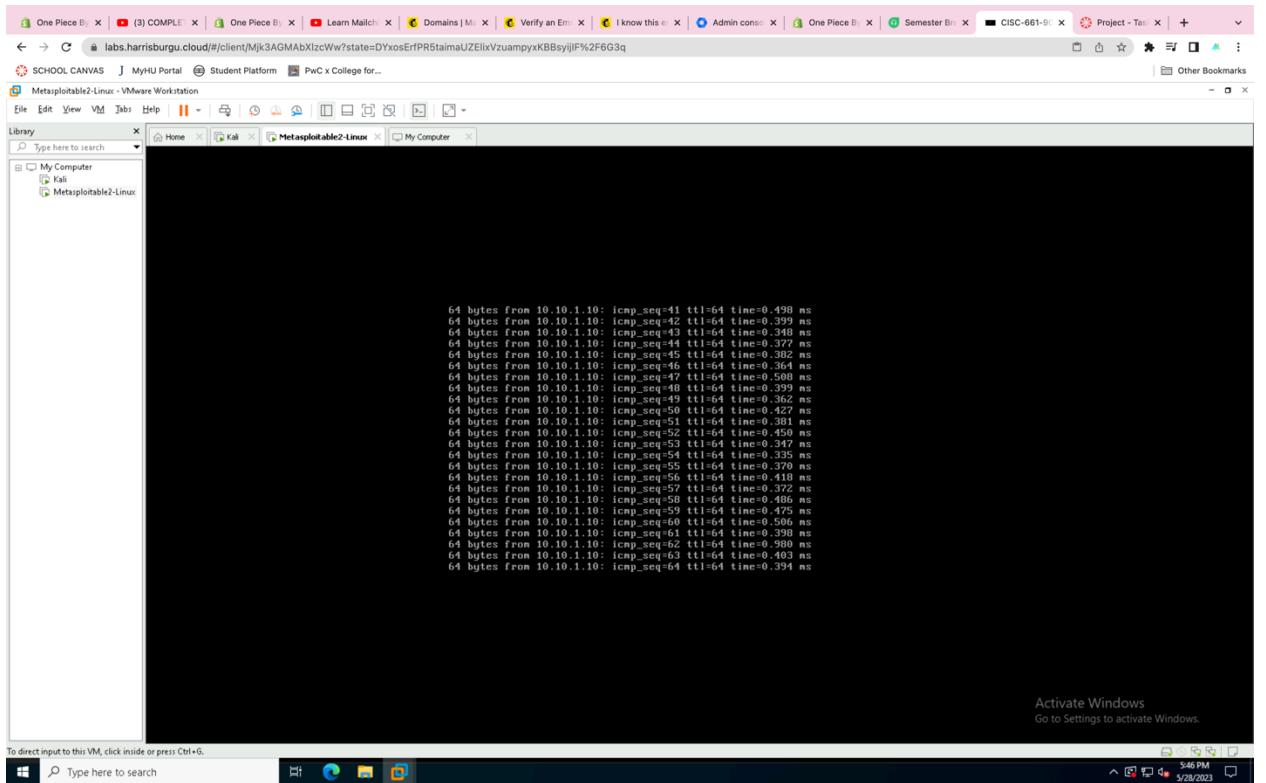
# alert tcp $EXTERNAL_NET any -> $TELNET_SERVERS 23 (msg:"TELNET Solaris memory mismanagement exploit attempt"; flow:to_server,established; content:"RMD"; content:"\r\n\r\n";)
alert tcp $EXTERNAL_NET any -> $TELNET_SERVERS 23 (msg:"TELNET SGI telnetd format bug"; flow:to_server,established; content:"RMD"; content:"\r\n\r\n";)
alert tcp $EXTERNAL_NET any -> $TELNET_SERVERS 23 (msg:"TELNET SGI telnetd format bug"; flow:to_server,established; content:"RMD"; content:"\r\n\r\n";)
alert tcp $EXTERNAL_NET any -> $TELNET_SERVERS 23 (msg:"TELNET livecd exploit"; flow:to_server,established; content:"FF E3 FF F2 FF F3 FF F4");
alert tcp $EXTERNAL_NET any -> $TELNET_SERVERS 23 (msg:"TELNET resolv.host.conf"; flow:to_server,established; content:"resolv.host.conf"; refid:"resolv.host.conf");
alert tcp $TELNET_SERVERS 23 -> $EXTERNAL_NET any (msg:"TELNET Attempted SU from wrong group"; flow:from_server,established; content:"to su ro");
alert tcp $TELNET_SERVERS 23 -> $EXTERNAL_NET any (msg:"TELNET not on console"; flow:from_server,established; content:"not on system console");
alert tcp $TELNET_SERVERS 23 -> $EXTERNAL_NET any (msg:"TELNET logon from service account"; flow:from_server,established; content:"root@192.168.1.100");
alert tcp $EXTERNAL_NET any -> $TELNET_SERVERS 23 (msg:"TELNET bsd exploit client finishing"; flow:to_client,established; dsizer>200; content:"40gifs");
alert tcp $EXTERNAL_NET any -> $TELNET_SERVERS 23 (msg:"TELNET 40gifs SGI account attempt"; flow:to_server,established; content:"40gifs");
alert tcp $EXTERNAL_NET any -> $TELNET_SERVERS 23 (msg:"TELNET Ezsetup account attempt"; flow:to_server,established; content:"OutOfBox");
alert tcp $EXTERNAL_NET any -> $TELNET_SERVERS 23 (msg:"TELNET Smarshot default admin account attempt"; flow:to_server,established; content:"Smrshot");
alert tcp $EXTERNAL_NET any -> $TELNET_SERVERS 23 (msg:"TELNET 1000eff default administrative account attempt"; flow:to_server,established; flowbits:isnotset);
alert tcp $EXTERNAL_NET any -> $TELNET_SERVERS 23 (msg:"TELNET login buffer overflow attempt"; flow:to_server,established; flowbits:isnotset);

```

- Start display information from detection on our screen.



- Ping 10.10.1.10 on Metasploitable



- Detection is then shown on Kali.

