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Information Security/ Blockchain

EXPERIMENT NUMBER: 4

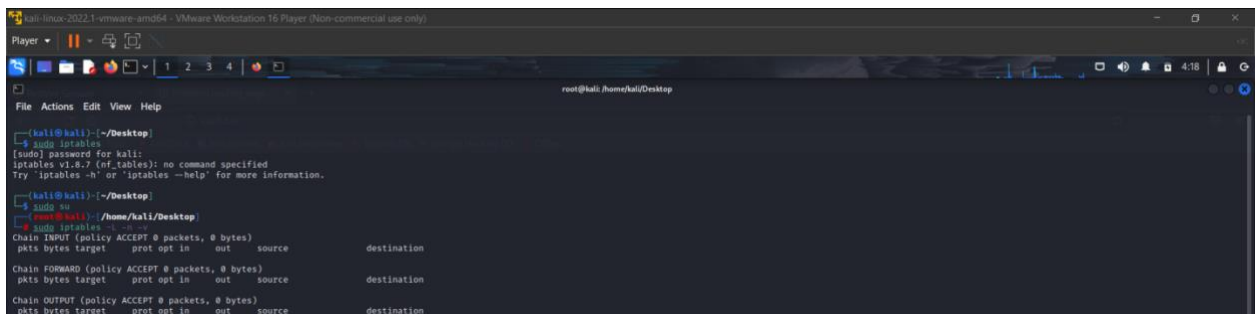
Student Name: Ekansh Sharma	UID: 20BCS3630
Branch: CSE-IS	Section & Group: 20BIS-KRG-1
Semester: 5 th	Date: 01-09-22
Course Name: Network Defence Essentials Lab	Course Code: 20CSB-331

1. Aim/Overview of the practical:

Implementing host-based firewall protection with IP tables.

2. Steps for experiment/practical:

1. Run command “*sudo iptables -L -n -v*” for displaying the table (here L is for list, v for verbose, n for numeric format)



```

kali@kali: ~/Desktop
└─$ sudo iptables
[sudo] password for kali:
iptables v1.6.7 (nf_tables): no command specified
Try 'iptables -h' or 'iptables --help' for more information.

kali@kali: ~/Desktop
└─$ sudo su
root@kali: /home/kali/Desktop
└─$ sudo iptables
Chain INPUT (policy ACCEPT 0 packets, 0 bytes)
pkts bytes target      prot opt in      out     source       destination
Chain FORWARD (policy ACCEPT 0 packets, 0 bytes)
pkts bytes target      prot opt in      out     source       destination
Chain OUTPUT (policy ACCEPT 0 packets, 0 bytes)
pkts bytes target      prot opt in      out     source       destination
  
```

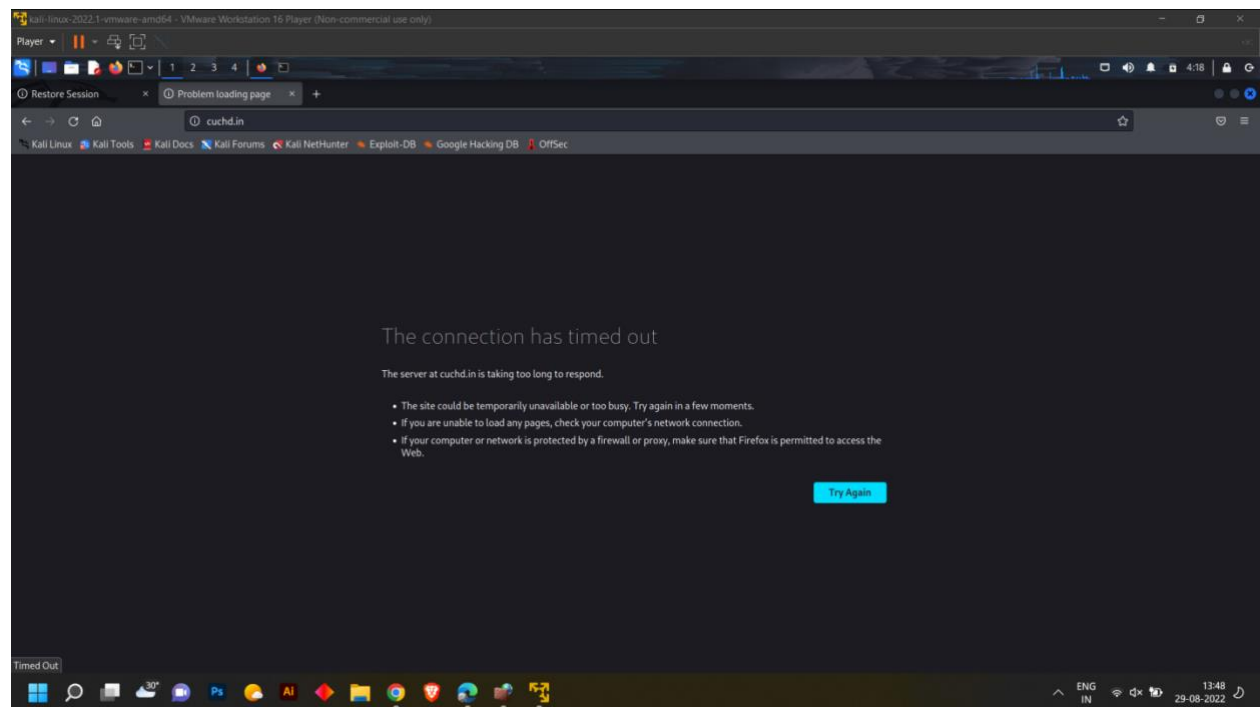
2. Run command “*sudo iptables -A INPUT -s cuchd.in -j DROP*” for blocking the website. (A to append a rule in input, s for source, j for jump to a particular rule)

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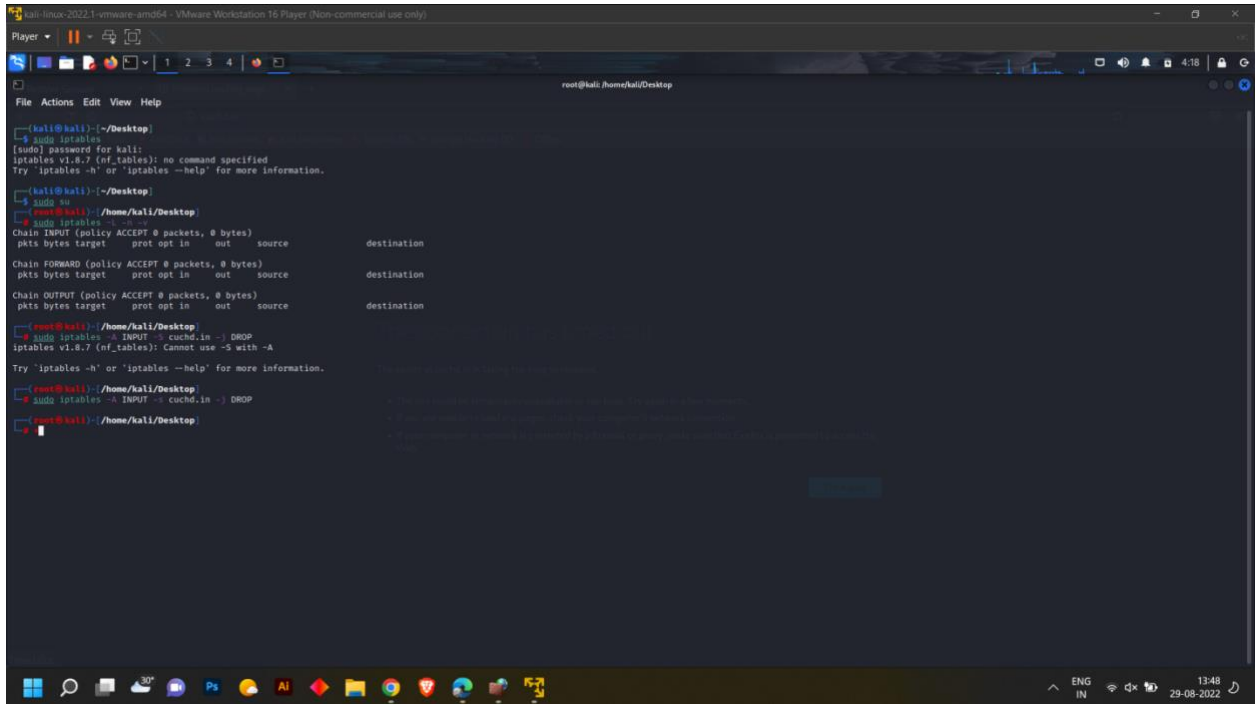
```
kali-linux-2022.1-vmware-amd64 - VMware Workstation 16 Player (Non-commercial use only)
Player
File Actions Edit View Help
root@kali: /home/kali/Desktop
(kali@kali)~[/Desktop]
$ sudo iptables
[sudo] password for kali:
iptables v1.8.7 (nf_tables): no command specified
Try 'iptables -h' or 'iptables --help' for more information.
(kali@kali)~[/Desktop]
$ sudo su
(root@kali)~[/home/kali/Desktop]
$ sudo iptables -L -n -v
Chain INPUT (policy ACCEPT 0 packets, 0 bytes)
pkts bytes target prot opt in out source destination
Chain FORWARD (policy ACCEPT 0 packets, 0 bytes)
pkts bytes target prot opt in out source destination
Chain OUTPUT (policy ACCEPT 0 packets, 0 bytes)
pkts bytes target prot opt in out source destination
(root@kali)~[/home/kali/Desktop]
$ sudo iptables -A INPUT -S cuchd.in -j DROP
iptables v1.8.7 (nf_tables): Cannot use -S with -A
Try 'iptables -h' or 'iptables --help' for more information.
```

Now, website cuchd.in is blocked.

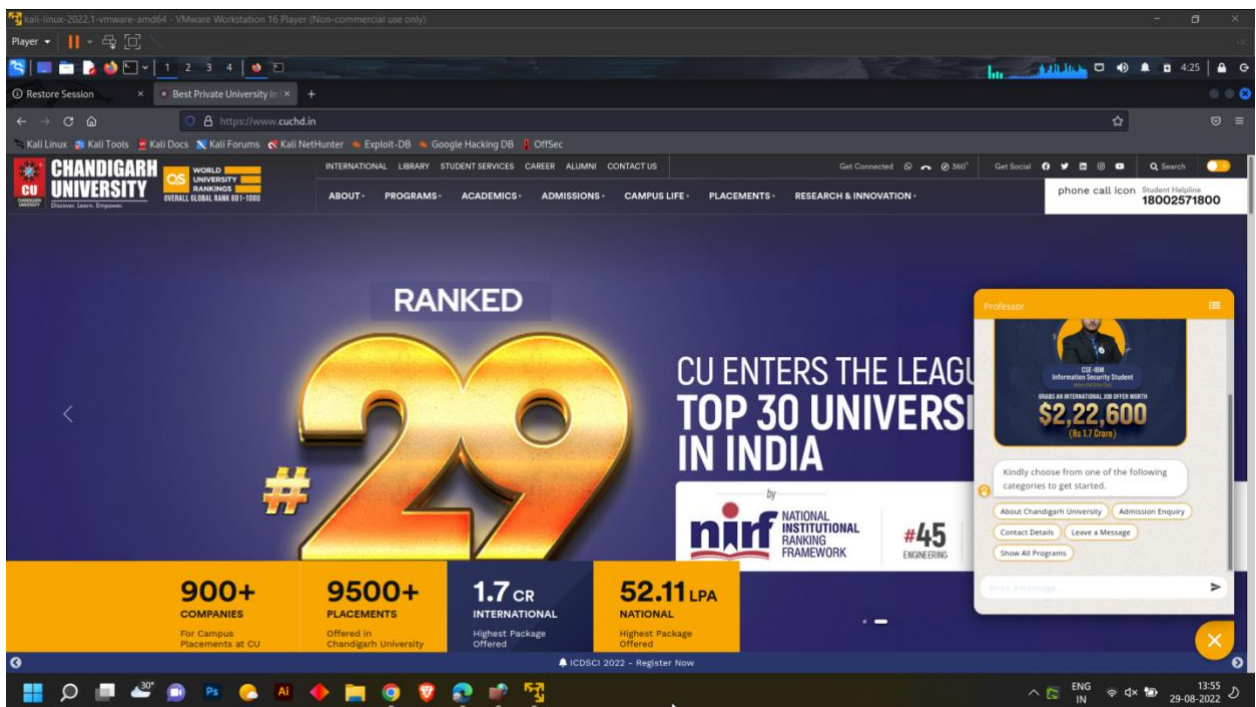


Now for deleting this rule use command ***“sudo iptables -D INPUT 1”***.

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Now, the website is again working.





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Learning outcomes (What I have learnt):

1. Learnt about the working of IP Tables.
2. Learn about Chain Input, forward and Output.

Evaluation Grid (Created as per the Assessment Model):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.	Worksheet completion		8
2.	Conduct of Experiment		12
3.	Quiz/Viva Voce		10
	Total		30