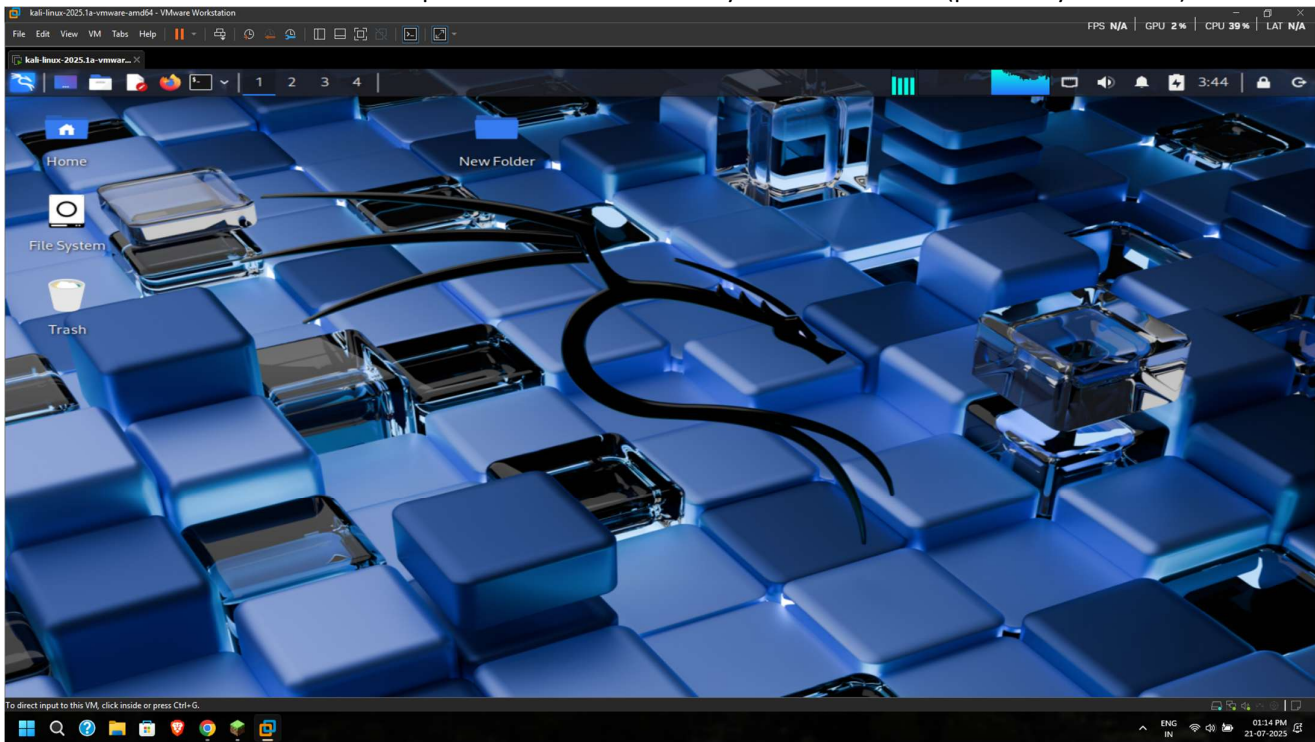
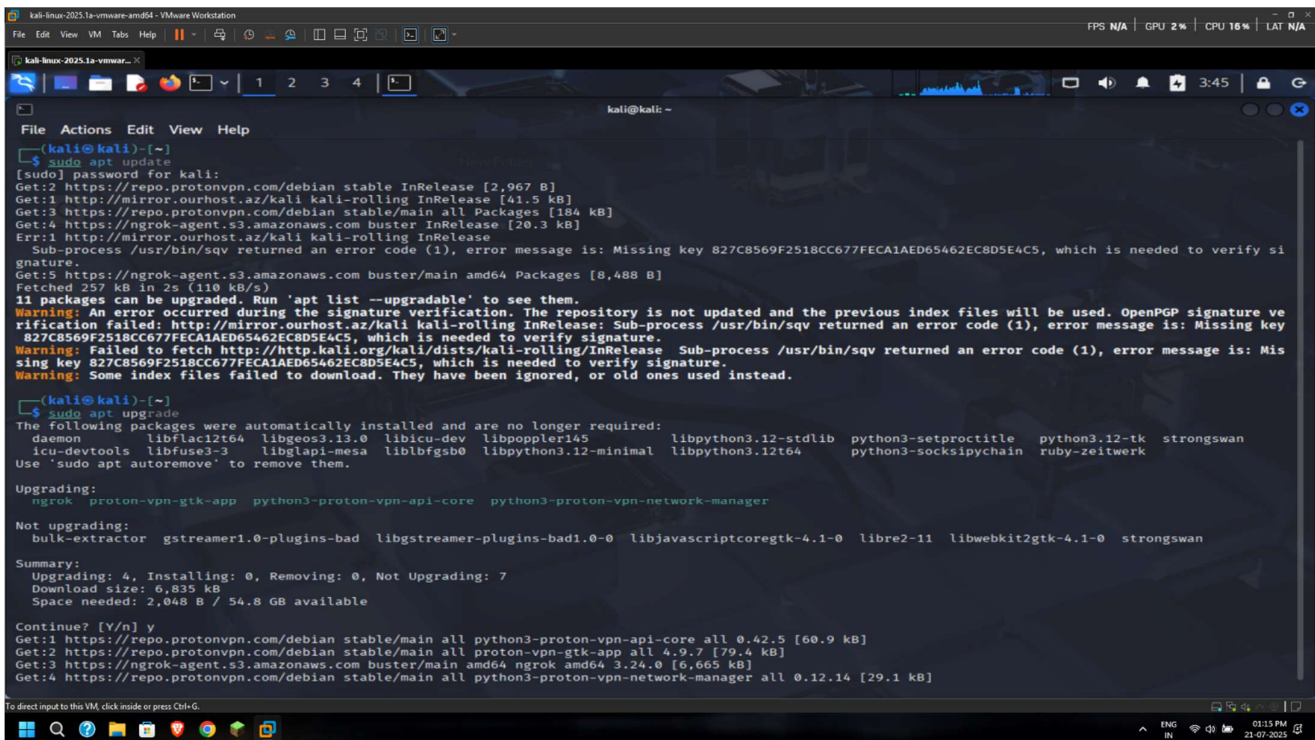


MODULE 1-4

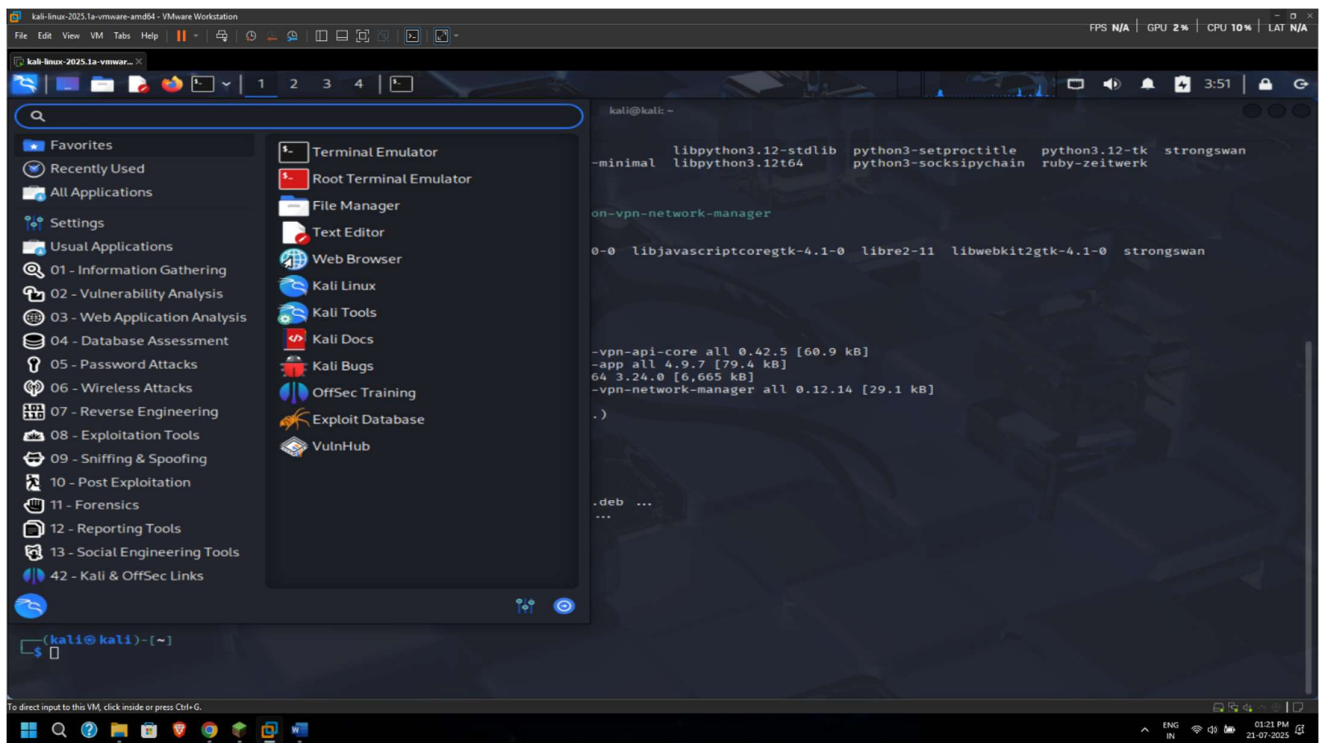
1. Install VirtualBox or VMware. Set up a virtual machine with any Linux distribution (preferably Kali Linux).



2. Install Kali Linux in your virtual machine and update it..



3. Explore the applications menu in Kali Linux. List 5 tools and their purpose.



1. Nmap:

A network scanner used for discovering hosts and services on a network. It helps identify open ports, operating systems, and running services.

2. Wireshark:

A packet analyzer that captures and inspects network traffic. It's used to analyze network communication, diagnose issues, and identify security vulnerabilities.

3. Metasploit:

A penetration testing framework that provides tools and modules for identifying, exploiting, and validating vulnerabilities. It's used for simulating attacks and testing system security.

4. Burp Suite:

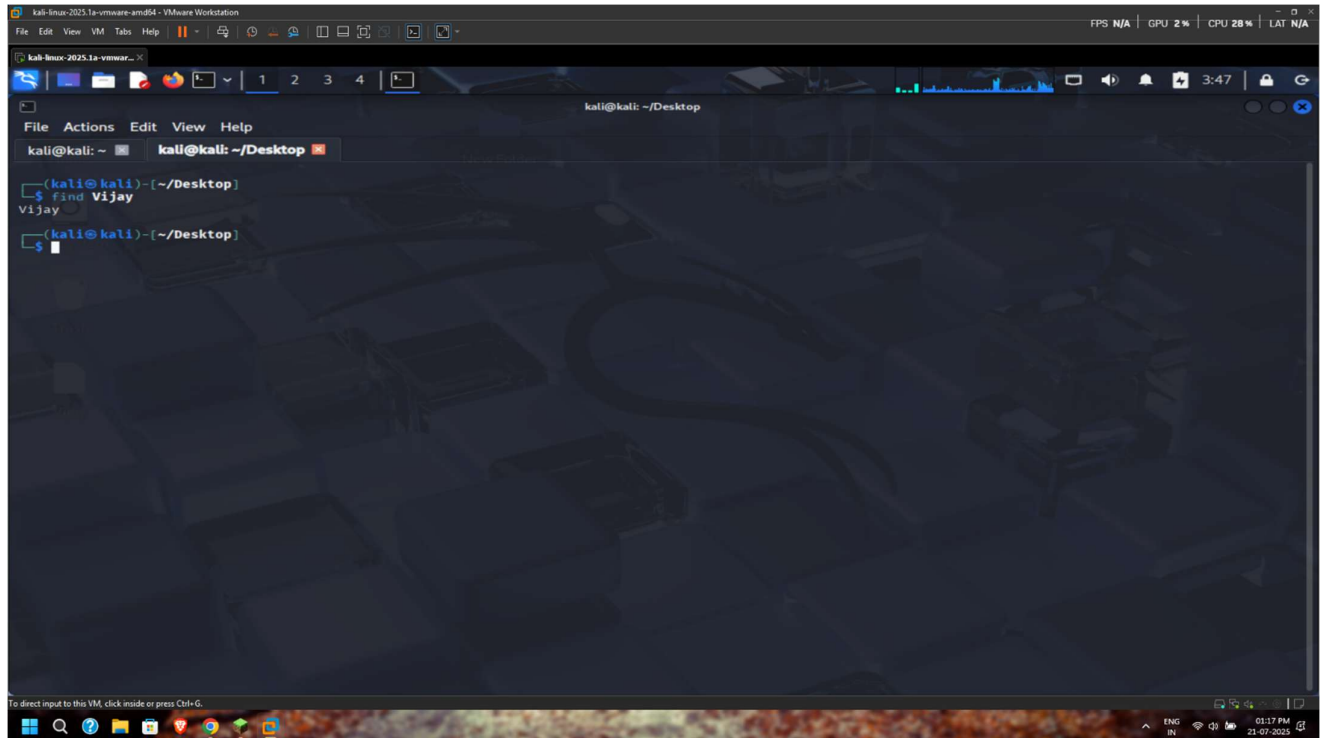
A web application security testing tool that includes features for intercepting, analyzing, and modifying HTTP requests and responses. It's used for finding vulnerabilities in web applications.

5. Nikto

Nikto is a vulnerability scanner for assessing the security of web servers and applications. It scans web environments for potential vulnerabilities, misconfigurations, and security risks.

4. Execute the following Linux commands:

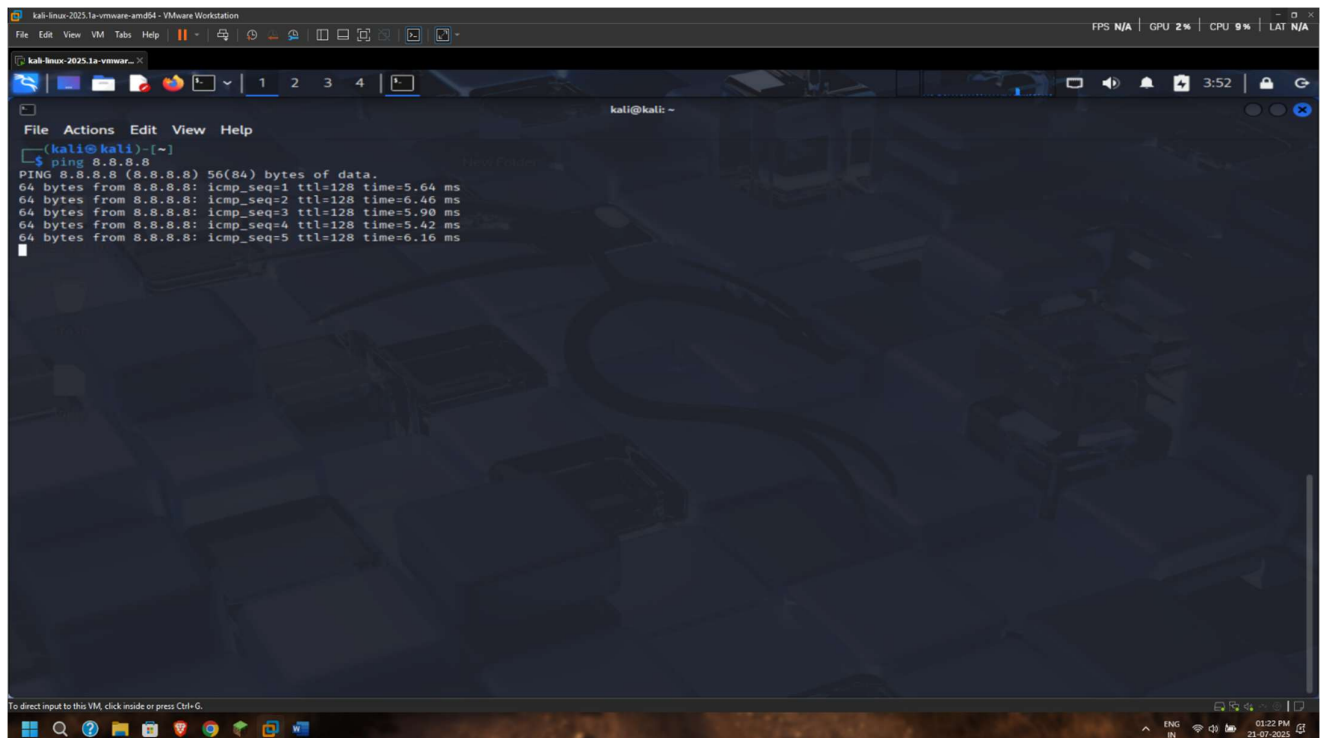
- Find command



The screenshot shows a Kali Linux terminal window titled 'kali-linux-2025.1a-vmware-amd64 - VMware Workstation'. The terminal prompt is 'kali@kali: ~/Desktop'. The user has entered the command 'find Vijay', and the output is 'Vijay'. The terminal window has a menu bar with 'File', 'Actions', 'Edit', 'View', and 'Help'. The status bar at the bottom shows 'To direct input to this VM, click inside or press Ctrl+G.' and system icons for network, volume, and time (01:17 PM, 21-07-2025).

```
kali@kali: ~/Desktop
kali@kali: ~/Desktop
$ find Vijay
Vijay
kali@kali: ~/Desktop
$
```

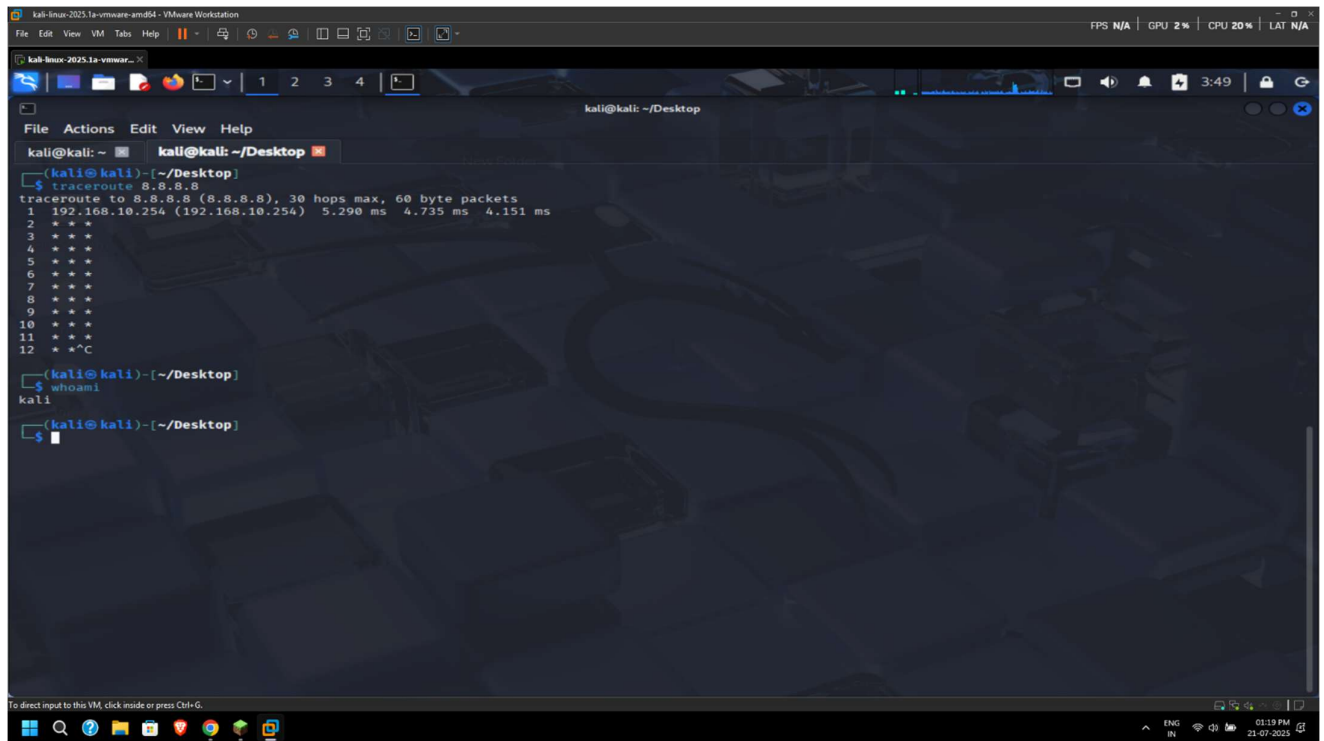
- Ping command



The screenshot shows a Kali Linux terminal window titled 'kali-linux-2025.1a-vmware-amd64 - VMware Workstation'. The terminal prompt is 'kali@kali: ~'. The user has entered the command 'ping 8.8.8.8', and the output shows five successful ping requests with varying response times. The terminal window has a menu bar with 'File', 'Actions', 'Edit', 'View', and 'Help'. The status bar at the bottom shows 'To direct input to this VM, click inside or press Ctrl+G.' and system icons for network, volume, and time (01:22 PM, 21-07-2025).

```
kali@kali: ~
kali@kali: ~
$ ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data:
64 bytes from 8.8.8.8: icmp_seq=1 ttl=128 time=5.64 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=128 time=6.46 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=128 time=5.90 ms
64 bytes from 8.8.8.8: icmp_seq=4 ttl=128 time=5.42 ms
64 bytes from 8.8.8.8: icmp_seq=5 ttl=128 time=6.16 ms
$
```

- Traceroute command

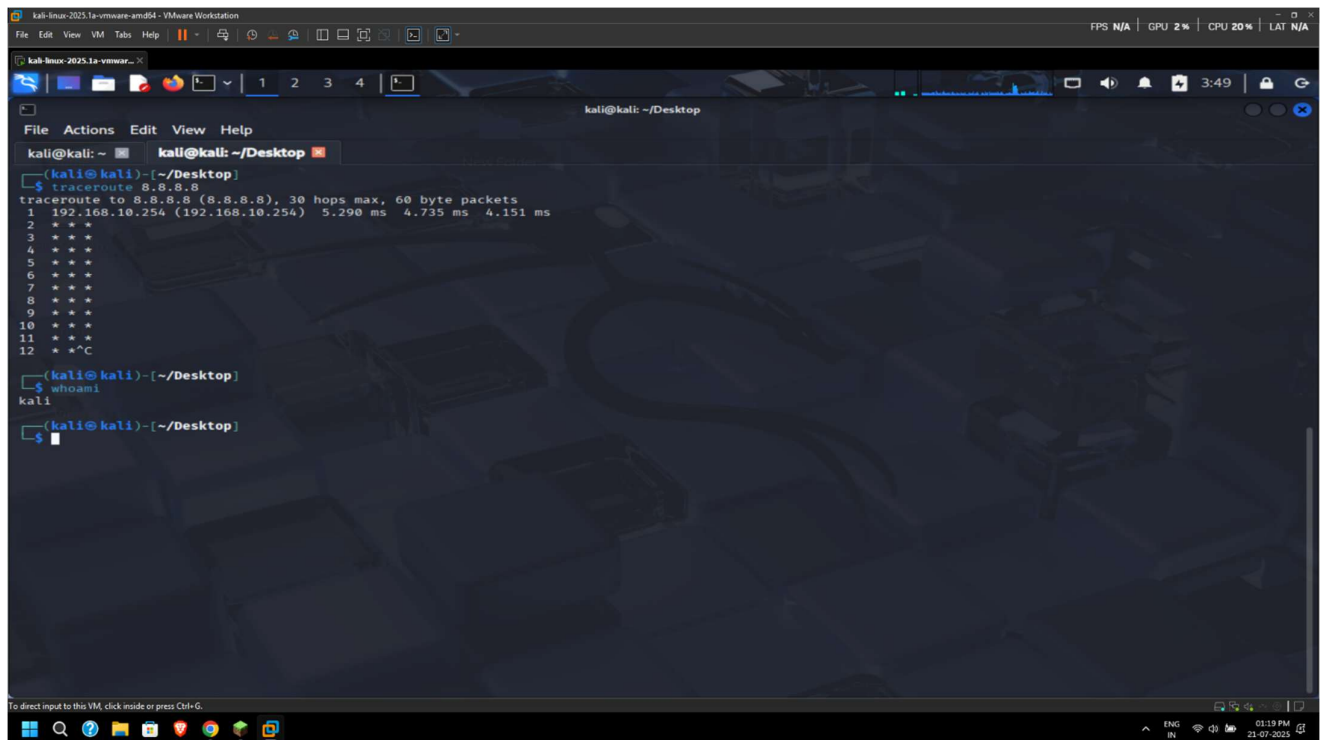


The screenshot shows a Kali Linux terminal window titled "kali@kali: ~/Desktop". The terminal displays the following commands and output:

```
kali@kali: ~  
kali@kali: ~/Desktop  
$ traceroute 8.8.8.8  
traceroute to 8.8.8.8 (8.8.8.8), 30 hops max, 60 byte packets  
1 192.168.10.254 (192.168.10.254) 5.290 ms 4.735 ms 4.151 ms  
2 * * *  
3 * * *  
4 * * *  
5 * * *  
6 * * *  
7 * * *  
8 * * *  
9 * * *  
10 * * *  
11 * * *  
12 * * C
```

Below the traceroute output, the user enters the command `whoami`, which returns `kali`. The terminal prompt is then `kali@kali: ~/Desktop`.

- Whoami command

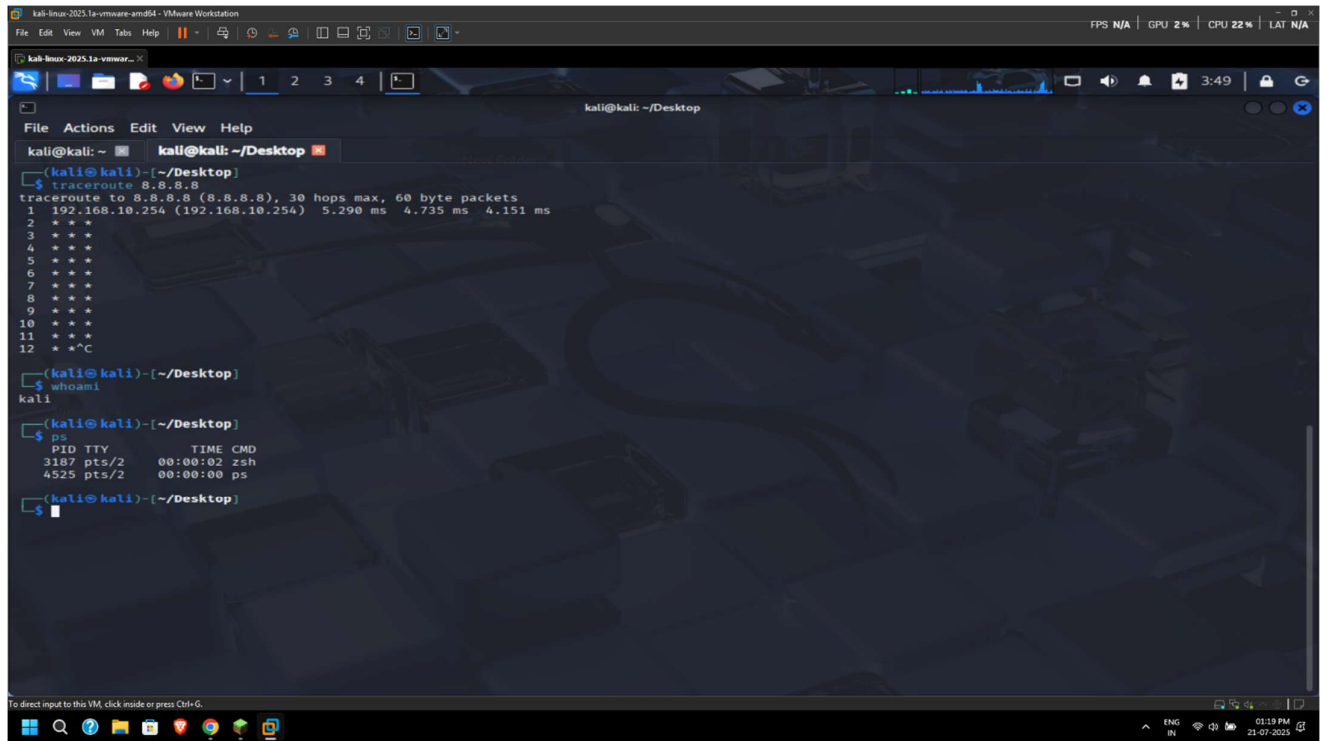


The screenshot shows a Kali Linux terminal window titled "kali@kali: ~/Desktop". The terminal displays the following commands and output:

```
kali@kali: ~  
kali@kali: ~/Desktop  
$ traceroute 8.8.8.8  
traceroute to 8.8.8.8 (8.8.8.8), 30 hops max, 60 byte packets  
1 192.168.10.254 (192.168.10.254) 5.290 ms 4.735 ms 4.151 ms  
2 * * *  
3 * * *  
4 * * *  
5 * * *  
6 * * *  
7 * * *  
8 * * *  
9 * * *  
10 * * *  
11 * * *  
12 * * C
```

Below the traceroute output, the user enters the command `whoami`, which returns `kali`. The terminal prompt is then `kali@kali: ~/Desktop`.

- Ps command



The screenshot shows a Kali Linux terminal window with a dark theme. The terminal displays the following commands and their outputs:

```
kali@kali: ~  
$ traceroute 8.8.8.8  
traceroute to 8.8.8.8 (8.8.8.8), 30 hops max, 60 byte packets  
1 192.168.10.254 (192.168.10.254) 5.290 ms 4.735 ms 4.151 ms  
2 * * *  
3 * * *  
4 * * *  
5 * * *  
6 * * *  
7 * * *  
8 * * *  
9 * * *  
10 * * *  
11 * * *  
12 * * C  
  
kali@kali: ~  
$ whoami  
kali  
  
kali@kali: ~  
$ ps  
PID TTY          TIME CMD  
3187 pts/2    00:00:02 zsh  
4525 pts/2    00:00:00 ps  
  
kali@kali: ~  
$
```

The terminal window is titled "kali-linux-2025.1a-vmware-vm" and shows a file manager view of the desktop. The system status bar at the bottom indicates the time is 01:19 PM on 21-07-2025.