

## AI FOR CYBERSECURITY WITH IBM QRADAR

### ASSIGNMENT 2

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Kali Linux is a powerful and popular Linux distribution designed for penetration testing, ethical hacking, and cybersecurity tasks. While I can provide you with a basic overview of some common tasks and commands in Kali Linux, please note that using Kali Linux for any unauthorized or malicious activities is illegal and unethical. Always ensure you have proper authorization and adhere to ethical guidelines when using Kali Linux.

Here are some common tasks and commands in Kali Linux:

1. **\*\*Updating Kali Linux:\*\***

```
``bash
sudo apt update
sudo apt upgrade
``
```

2. **\*\*Installing New Tools:\*\***

Kali Linux comes with a wide range of pre-installed tools for penetration testing, but you can also install additional tools using `apt`:

```
``bash
sudo apt install <package-name>
``
```

3. **\*\*Changing the Root Password:\*\***

To change the root password, use the `passwd` command:

```
``bash
sudo passwd root
``
```

4. **\*\*Creating a New User:\*\***

To create a new user, use the `adduser` command:

```
``bash
sudo adduser <username>
``
```

5. **\*\*Switching to the Root User:\*\***

You can switch to the root user with the `su` command:

```
``bash
su -
``
```

6. **\*\*Network Configuration:\*\***

- To view network interfaces:

```
``bash
ifconfig
```
```

- To change network settings (e.g., IP address, subnet mask):

```
``bash
sudo nano /etc/network/interfaces
```
```

#### 7. **\*\*Scanning for Open Ports:\*\***

Use `nmap` to scan for open ports on a target system:

```
``bash
nmap <target-IP>
```
```

#### 8. **\*\*Vulnerability Scanning:\*\***

Kali Linux includes tools like OpenVAS for vulnerability assessment. You can start OpenVAS using:

```
``bash
openvas start
```
```

#### 9. **\*\*Web Application Testing:\*\***

Tools like Burp Suite are commonly used for web application testing. You can launch Burp Suite from the applications menu.

#### 10. **\*\*Cracking Passwords:\*\***

Kali Linux includes tools like John the Ripper and Hashcat for password cracking.

#### 11. **\*\*Wireless Network Assessment:\*\***

For wireless network assessment and cracking, you can use tools like Aircrack-ng.

#### 12. **\*\*Metasploit Framework:\*\***

Kali Linux includes the Metasploit Framework for exploitation and post-exploitation tasks.

#### 13. **\*\*Packet Capture and Analysis:\*\***

Wireshark is a powerful tool for capturing and analyzing network packets. Install it using `sudo apt install wireshark`.

#### 14. **\*\*File System Navigation:\*\***

Use basic Linux commands like `cd`, `ls`, `mv`, `cp`, and `rm` to navigate and manipulate files and directories.

#### 15. **\*\*File Editing:\*\***

You can use text editors like `nano` or `vi` to edit files in the terminal.

#### 16. **\*\*Shutdown or Reboot:\*\***

To shut down or reboot the system:

```
```bash
```

```
sudo shutdown -h now    # Shutdown
```

```
sudo reboot             # Reboot
```

```
```
```