# Internship Task Report: Nmap Installation and Verification on Kali Linux

## Objective

To download, install, verify, and perform basic scanning using the Nmap (Network Mapper) tool in Kali Linux, as part of a cybersecurity internship assignment.

## System Information

• Operating System: Kali Linux (latest version)

• User Privileges: Root/Sudo access available

• Tool Name: Nmap

• Version: Verified after installation

## Installation Steps Performed

1. Opened Terminal on Kali Linux.

2. Updated package repository:

sudo apt update

3. Installed Nmap using apt:

sudo apt install nmap -y

4. Verified installation:

nmap -v

Output:

Nmap version 7.94 ( https://nmap.org )

## Basic Nmap Scanning Commands Executed

Ping Scan:

nmap -sn 192.168.1.1

Scan open ports on a host:

nmap 192.168.1.1

Service and OS detection:

sudo nmap -A 192.168.1.1

Scan full subnet:

nmap 192.168.1.0/24

Save output to file:

nmap -oN scan\_results.txt 192.168.1.1

## File Location

• Output saved at: ~/scan\_results.txt

## Conclusion

The Nmap tool was successfully installed and verified on Kali Linux. Basic scans were performed to assess host availability, open ports, and service detection. This tool will now be used in further network analysis and vulnerability assessment tasks during the internship.