

HRISHIK MANOJ  
21BCE8607  
VITAP  
CSE WITH SPECIALIZATION IN CYBER SECURITY

## **Assignment-2**

Title: An Overview of the First 10 Tools in Kali Linux

### Tool 1: Nmap

Nmap, short for "Network Mapper," is a computer program used to explore and examine networks. It helps people find out which devices are connected to a network, what services or programs those devices are running, and which network ports are open. Think of it like a detective tool for your computer network – it helps you see what's going on and identify potential areas that might need extra security or attention.

### Tool 2: Wireshark

Wireshark is like a detective tool for your computer's network traffic. It lets you see and analyze the data going in and out of your device while it's connected to the internet. Imagine it as a magnifying glass that helps you understand what's happening with your online communication. You can use it to troubleshoot network issues, check for security problems, or simply satisfy your curiosity about what's happening behind the scenes when you're online.

### Tool 3: Metasploit Framework

The Metasploit Framework is like a Swiss Army knife for computer security experts and hackers, but it can be used for both good and bad purposes. It's a software tool that helps people test the security of computer systems. Imagine it as a toolkit that contains various tools and tricks to find vulnerabilities in computer systems and networks. It can be used to identify weaknesses in a system's defenses so that they can be fixed. However, it can also be misused to exploit those vulnerabilities for unauthorized access or malicious purposes.

### Tool 4: Burp Suite

Burp Suite is like a superhero tool for web security experts. It's a software program used to find and fix security issues in websites and web applications. Think of it as a super scanner that crawls through websites, looking for weak spots that hackers could exploit. It helps web developers and security professionals discover and correct vulnerabilities before bad actors can use them for malicious purposes. Burp Suite is a critical tool for making the internet a safer place by finding and fixing security problems in websites and web apps.

#### Tool 5: Hydra

Hydra is a computer program that acts like a digital locksmith. It's used to break into password-protected systems or accounts by trying different combinations of usernames and passwords until it finds the right one. Think of it as a tool that repeatedly tries keys in a lock until it successfully unlocks it. People use Hydra for various purposes, including testing the strength of their own passwords to make sure they are secure or, unfortunately, for trying to gain unauthorized access to systems or accounts. Hydra is a tool that can be used both for legitimate security testing and, in some cases, for unauthorized and malicious purposes. It's crucial to use it responsibly and within legal and ethical boundaries.

#### Tool 6: Nikto

Nikto is like a security scanner for websites. It's a software tool used to check websites for vulnerabilities and potential security issues. Think of Nikto as a digital detective that goes through a website's code and structure, looking for weaknesses that could be exploited by hackers. It helps website administrators and security experts find and fix these vulnerabilities before they can be used for malicious purposes. It is a tool that helps keep websites safe by uncovering and addressing security problems. It's a valuable resource for protecting websites from cyber threats.

#### Tool 7: Mimikatz

Mimikatz is like a digital keychain thief. It's a software tool that can steal passwords and other sensitive information from a computer's memory, where this data is temporarily stored when you log in or use certain programs. Think of it as a sneaky tool that secretly grabs keys (passwords) from your computer's memory, allowing someone to access your accounts or systems without knowing your actual password. People use Mimikatz for various purposes, including security testing and, unfortunately, for malicious activities.

#### Tool 8: Hashcat

Hashcat is like a super-fast and powerful puzzle solver for computer passwords. It's a software tool that helps people recover or "crack" passwords that are stored as scrambled codes, known as hashes. Imagine you have a locked box, and you only know the scrambled code on the lock. Hashcat tries countless combinations at lightning speed until it finds the code that unlocks the box (the password). People use Hashcat for various reasons, including testing the security of their own passwords or, sometimes, for unauthorized and malicious purposes.

#### Tool 9: CherryTree

CherryTree is like a digital notebook on your computer. It's a software application that helps you organize and store information in a structured and easy-to-navigate way. Think of it as a place where you

can create and store all sorts of notes, like text, links, images, and more. You can use it for things like keeping track of your ideas, making to-do lists, saving important information, or even organizing research. It is a handy tool for collecting and managing your thoughts and information, sort of like a virtual scrapbook or notebook for your computer.

#### Tool 10: Sqlmap

SQLmap is like a digital locksmith for databases. It's a software tool used to find and exploit weaknesses in websites that use databases to store information. Imagine SQLmap as a tool that tries to figure out the secret codes to unlock a website's database. It does this by probing the website and looking for security holes that might allow it to access, modify, or steal data. While SQLmap can be used for legitimate security testing by website owners, it can also be misused by hackers for unauthorized and malicious purposes. So, it's crucial to use it responsibly and ethically within legal boundaries.