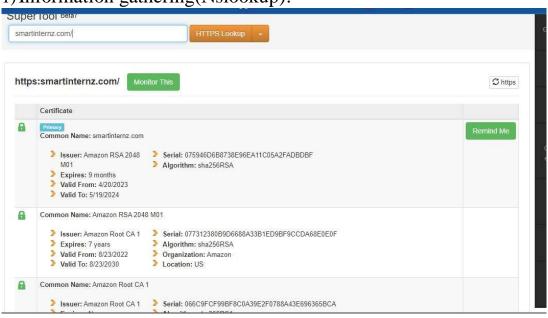
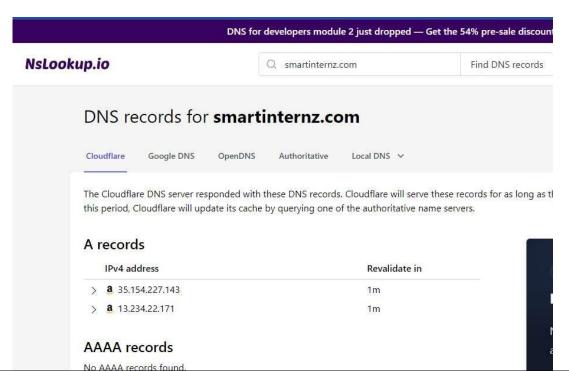
Mohan raj G 21BCE8646

Kali Linux Tools

1) Information gathering(Nslookup):





It helps to fin	nd static ip/ip on which site is hosted
2) Vulnerability scan(Nmap)	

It helps to find open ports (to perform attack) and version of packages related to port

3) Web Application analysis (WordPress Security Scanner)



It scan the wordpress website and find vulnerability in it.

4) Database assessment(SqlMap)

Sqlmap find vulnerability to attack on databases of given url.

5) Password Attacks(Crunch)

```
(anonymous® anonymous)-[~]

$ crunch 2 4 >Desktop/wordlist.txt

Crunch will now generate the following amount of data: 2357212 bytes

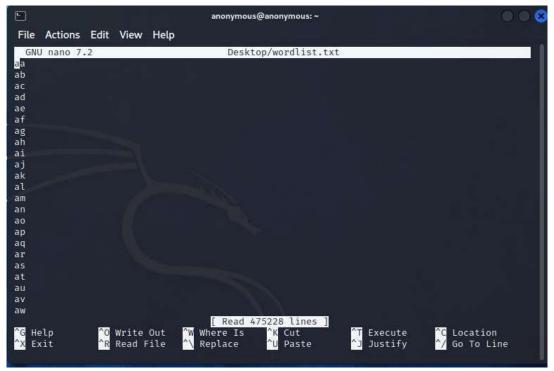
2 MB

0 GB

0 TB

0 PB

Crunch will now generate the following number of lines: 475228
```



Crunch create a wordlist(dictionary) as user choice for brute force password attack

6) Wireless Attacks (Reaver)

```
anonymous@anonymous: ~
File Actions Edit View Help
$ reaver -h
Reaver v1.6.6 WiFi Protected Setup Attack Tool
Copyright (c) 2011, Tactical Network Solutions, Craig Heffner <cheffner@tacnetsol.com>
Required Arguments:
       -i, --interface=<wlan>
-b, --bssid=<mac>
                                         Name of the monitor-mode interface to use
                                         BSSID of the target AP
Optional Arguments:
       -m, --mac=<mac>
-e, --essid=<ssid>
                                         MAC of the host system
                                         ESSID of the target AP
        -c, --channel=<channel>
                                         Set the 802.11 channel for the interface (implies -f
        -s, --session=<file>
                                         Restore a previous session file
        -C, -exec=<command>
                                         Execute the supplied command upon successful pin rec
overy
        -f, --fixed
                                         Disable channel hopping
        -5, --5ghz
-v, --verbose
                                         Use 5GHz 802.11 channels
                                         Display non-critical warnings (-vv or -vvv for more)
        -q, --quiet
-h, --help
                                         Only display critical messages
                                         Show help
Advanced Options:
                                         Use the specified pin (may be arbitrary string or 4/
        -p, --pin=<wps pin>
8 digit WPS pin)
                                         Set the delay between pin attempts [1]
        -d, --delay=<seconds>
```

Reaver is a wireless attack tool to get Wi-Fi credential. For ex for WPS ,it brute force WPS pin and can set to wait for particular time to continue again

7) Reverse Engineering(Clang++)

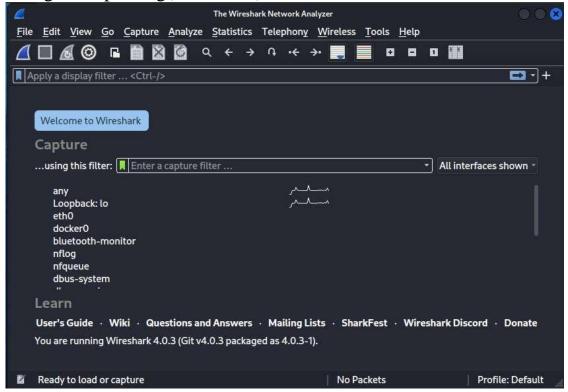
```
anonymous@anonymous: ~
File Actions Edit View Help
$ clang++ --help
OVERVIEW: clang LLVM compiler
USAGE: clang [options] file...
OPTIONS:
                          Print (but do not run) the commands to run for this compilation
  --amdgpu-arch-tool=<value>
                          Tool used for detecting AMD GPU arch in the system.
  -- analyzer-output <value>
                          Static analyzer report output format (html/plist/plist-multi-file/
plist-html|sarif|sarif-html|text).
  --analyze
                          Run the static analyzer
  -arcmt-migrate-emit-errors
                          Emit ARC errors even if the migrator can fix them
  -arcmt-migrate-report-output <value>
                          Output path for the plist report
                         Search $prefix$file for executables, libraries, and data files. If
  -B <prefix>
 $prefix is a directory, search $prefix/$file
  -b <arg>
                         Pass -b <arg> to the linker on AIX (only).
 -cc
                          Include comments from within macros in preprocessed output
                       OpenCL only. Allow denormals to be flushed to zero.
 -cl-denorms-are-zero
 -cl-fast-relaxed-math OpenCL only. Sets -cl-finite-math-only and -cl-unsafe-math-optimiz
ations, and defines __FAST_RELAXED_MATH_
 -cl-finite-math-only
                         OpenCL only. Allow floating-point optimizations that assume argume
nts and results are not NaNs or +-Inf.
  -cl-fp32-correctly-rounded-divide-sqrt
```

Clang++ helps to analyse packages to retrieve information code or process of development. TO develop crack of a software ,reverse engineering is done ,the according to code malicious dll or package is created to crack it

8) Exploitation Tools (Metaslpoit framework)

```
Shell No. 1
File Actions Edit View Help
$ sudo msfdb init & msfconsole
[sudo] password for anonymous:
[+] Starting database
[i] The database appears to be already configured, skipping initialization
                *********
             : ត
                             @@`;
" බබබබබ'.,'බබ
                            කතතතත ',. 'කතතත
                            බබබබබබබබබබබබබ බ;
    aaaaaaaaaaaaaaa .
          . බබබ - . බ
                ; 0
              බබබබ බබබ
                           a
                බබබ බබ
                          00
                          മര
                 . aaaaa
                  . aa
                                              Metasploit!
                  ;a;'.,_*_;'
       =[ metasploit v6.3.4-dev
  -- --=[ 2294 exploits - 1201 auxiliary - 409 post
-- --=[ 968 payloads - 45 encoders - 11 nops
     -=[ 9 evasion
```

9) Sniffing and Spoofing(Wireshark)



Wireshark helps to analyze or live monitoring of network to know the traffic or data transmission over network layer of packets. If data is transmitted by http, sniffer will get the actual data sent through it.

10) Post Exploitation(Mimikatz)

```
File Actions Edit View Help

> mimikatz ~ Uses admin rights on Windows to display passwords in plaintext

/usr/share/windows-resources/mimikatz

kiwi_passwords.yar

mimicom.idl

win32

mimidrv.sys

mimilib.dll

mimilove.exe

mimilove.exe

mimilove.sys

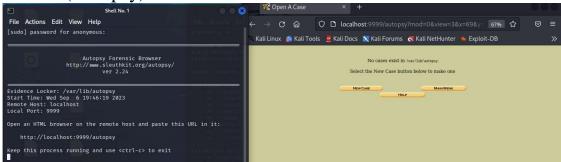
mimikatz.exe

mimilove.out

m
```

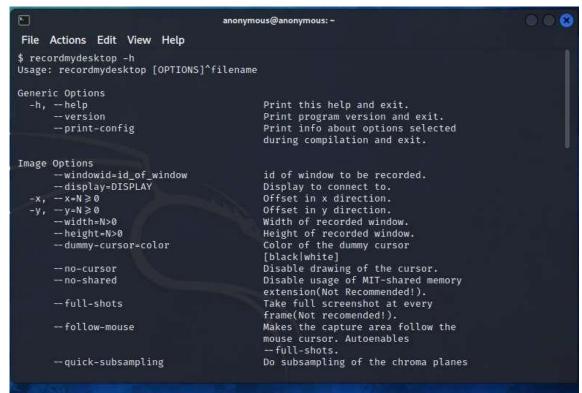
After execution of attack, if anyone want to trace, foot printing mimikatz can be used. It save the data in memory and perform operation to know how it perform. Sometimes it also help to retrieve password as password are saved in memory for useful purpose.

11) Forensic (Autopsy)



Autopsy is an easy to use, GUI-based program that allows you to efficiently analyze hard drives and smart phones. It has a plug-in architecture that allows you to find add-on modules or develop custom modules in Java or Python.

12) Reporting Tools(RecordmyDesktop)



Recordmydesktop is report creation in form of video with version of os with customized recording area of screen.

13) Social Engineering Tools(MSF Payload Creator)

```
anonymous@anonymous: ~
File Actions Edit View Help
$ msfpc
 [*] MSFvenom Payload Creator (MSFPC v1.4.5)
 [i] Missing TYPE or BATCH/LOOP mode
  /usr/bin/msfpc <TYPE> (<DOMAIN/IP>) (<PORT>) (<CMD/MSF>) (<BIND/REVERSE>) (<STAGED/STAGELES
S>) (<TCP/HTTP/HTTPS/FIND_PORT>) (<BATCH/LOOP>) (<VERBOSE>)
   Example: /usr/bin/msfpc windows 192.168.1.10 # Windows & manual IP.
/usr/bin/msfpc elf bind eth0 4444 # Linux, eth0's IP & manual port.
/usr/bin/msfpc stageless cmd py https
/usr/bin/msfpc verbose loop eth1 # A payload for every type, using eth
1's IP.
                                                                       # All possible Meterpreter payloads,
using WAN IP.
               /usr/bin/msfpc help verbose
                                                                       # Help screen, with even more informa
tion.
 <TYPE>:
    + APK
    + ASP
    + Bash [.sh]
+ Java [.jsp]
+ Linux [.elf]
+ OSX [.macho]
    + Perl [.pl]
    + Powershell [.ps1]
    + Python [.py]
+ Tomcat [.war]
      Windows [.exe // .exe // .dll]
 Rather than putting <DOMAIN/IP>, you can do a interface and MSFPC will detect that IP addre
```

To create malware for social engineering after reconnaissance, MSF payload creator is one of the tool customized malware of defined OS and file type.