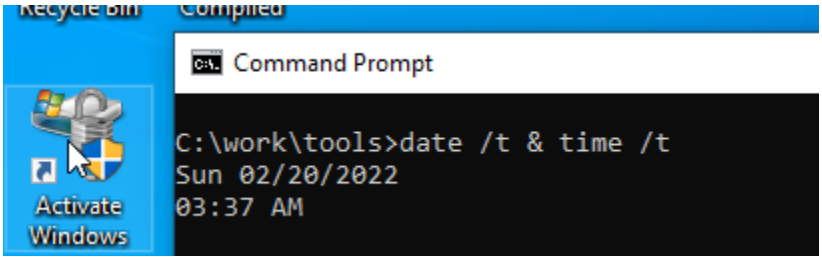
TASK 1: COLLECTING VOLATILE INFORMATION

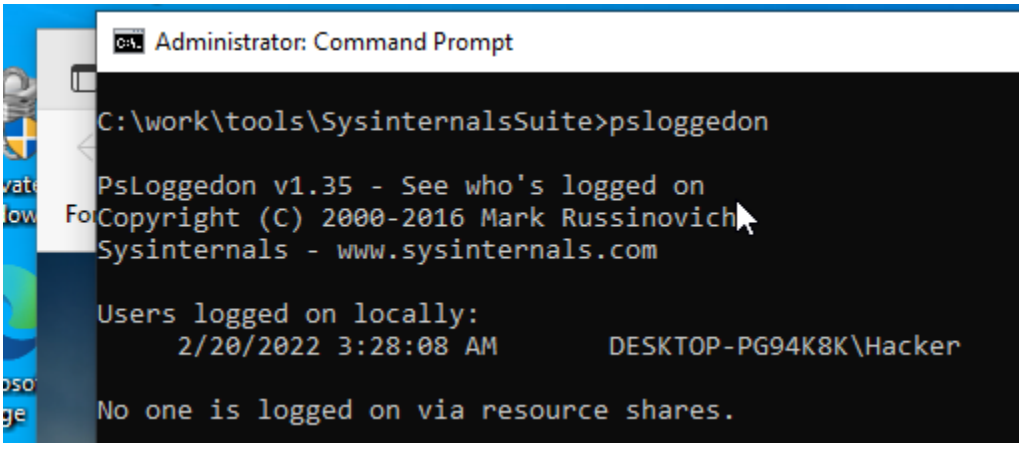
Part 1:



*To see the date and time of our machine we use this command "**date /t & time /t**"*

- ➔ ***date** gives us date*
- ➔ ***/t** shifts to next line*
- ➔ ***&** is used to put another command*
- ➔ ***tim**e gives us current time*

Part 2:



Okay so we have installed tools that are going to show us computer features. Here we are using psloggedon tool to see the current logged in user

Part 3:

```
C:\work\tools\SysinternalsSuite>logonsessions |findstr "logon session"
LogonSessions v1.41 - Lists logon session information
[0] Logon session 00000000:000003e7:
[1] Logon session 00000000:00005fa3:
[2] Logon session 00000000:0000694d:
[3] Logon session 00000000:0000695d:
[4] Logon session 00000000:000003e4:
[5] Logon session 00000000:0000bad5:
[6] Logon session 00000000:0000bb01:
[7] Logon session 00000000:000003e5:
[8] Logon session 00000000:000459bc:
[9] Logon session 00000000:000459f5:
```

*Here we are able to see how many active logon sessions are created and managed by Local Security Authority(**LSA**).*

We have used findstr to only show us the IDS of the sessions

```
C:\work\tools\SysinternalsSuite>logonsessions -p

LogonSessions v1.41 - Lists logon session information
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Sysinternals - www.sysinternals.com


[0] Logon session 00000000:000003e7:
    User name:    WORKGROUP\DESKTOP-PG94K8K$
    Auth package: NTLM
    Logon type:   (none)
    Session:      0
    Sid:          S-1-5-18
    Logon time:   2/20/2022 3:27:34 AM
    Logon server:
    DNS Domain:
    UPN:
      596: winlogon.exe
      688: lsass.exe
      792: svchost.exe
      880: svchost.exe
      984: svchost.exe
      708: svchost.exe
     1244: svchost.exe
     1288: svchost.exe
     1304: svchost.exe
     1472: svchost.exe
     1512: svchost.exe
```

***-p** flag is used to list down all the processes running on each session.*

Part 4:

```
C:\work\tools\SysinternalsSuite>netstat -a

Active Connections

  Proto  Local Address          Foreign Address        State
  TCP    0.0.0.0:135            DESKTOP-PG94K8K:0      LISTENING
  TCP    0.0.0.0:445            DESKTOP-PG94K8K:0      LISTENING
  TCP    0.0.0.0:5040           DESKTOP-PG94K8K:0      LISTENING
  TCP    0.0.0.0:7680           DESKTOP-PG94K8K:0      LISTENING
  TCP    0.0.0.0:49664          DESKTOP-PG94K8K:0      LISTENING
  TCP    0.0.0.0:49665          DESKTOP-PG94K8K:0      LISTENING
  TCP    0.0.0.0:49666          DESKTOP-PG94K8K:0      LISTENING
  TCP    0.0.0.0:49667          DESKTOP-PG94K8K:0      LISTENING
  TCP    0.0.0.0:49668          DESKTOP-PG94K8K:0      LISTENING
  TCP    0.0.0.0:49669          DESKTOP-PG94K8K:0      LISTENING
  TCP    0.0.0.0:49670          DESKTOP-PG94K8K:0      LISTENING
  TCP    0.0.0.0:56381          DESKTOP-PG94K8K:0      LISTENING
  TCP    127.0.0.1:10801        DESKTOP-PG94K8K:0      LISTENING
  TCP    127.0.0.1:19050        DESKTOP-PG94K8K:0      LISTENING
  TCP    127.0.0.1:49721        DESKTOP-PG94K8K:0      LISTENING
  TCP    127.0.0.1:49725        DESKTOP-PG94K8K:58049  ESTABLISHED
  TCP    127.0.0.1:49890        DESKTOP-PG94K8K:49891  ESTABLISHED
  TCP    127.0.0.1:49891        DESKTOP-PG94K8K:49890  ESTABLISHED
```

*"**netstat**" is a command line utility used to see network statistics, for example list down all the connections that have been established by the user*

```
C:\work\tools\SysinternalsSuite>tasklist

Image Name                     PID Session Name        Session#    Mem Usage
========================= ======== ================ =========== ============
System Idle Process              0 Services                   0          8 K
System                           4 Services                   0        144 K
Registry                       100 Services                   0     72,412 K
smss.exe                       348 Services                   0      1,212 K
csrss.exe                      444 Services                   0      5,204 K
wininit.exe                    520 Services                   0      6,944 K
csrss.exe                      536 Console                    1      5,468 K
winlogon.exe                   596 Console                    1     11,524 K
services.exe                   664 Services                   0      9,576 K
lsass.exe                      688 Services                   0     18,380 K
svchost.exe                    792 Services                   0      3,344 K
fontdrvhost.exe                800 Services                   0      3,408 K
fontdrvhost.exe                808 Console                    1      6,256 K
svchost.exe                    880 Services                   0     26,684 K
svchost.exe                    932 Services                   0     13,788 K
svchost.exe                    984 Services                   0      7,528 K
dwm.exe                        376 Console                    1     71,984 K
svchost.exe                    708 Services                   0      9,680 K
svchost.exe                   1112 Services                   0      6,056 K
svchost.exe                   1120 Services                   0      5,380 K
svchost.exe                   1128 Services                   0     20,220 K
```

*"**tasklist**" is a command line utility that displays running processes on a computer*

```
C:\work\tools\SysinternalsSuite>tasklist /FI "PID gt 700"

Image Name                     PID Session Name        Session#    Mem Usage
========================= ======== ================ =========== ============
svchost.exe                    792 Services                   0      3,344 K
fontdrvhost.exe                800 Services                   0      3,408 K
fontdrvhost.exe                808 Console                    1      6,260 K
svchost.exe                    880 Services                   0     26,684 K
svchost.exe                    932 Services                   0     13,788 K
svchost.exe                    984 Services                   0      7,544 K
svchost.exe                    708 Services                   0      9,680 K
svchost.exe                   1112 Services                   0      6,056 K
svchost.exe                   1120 Services                   0      5,380 K
svchost.exe                   1128 Services                   0     20,216 K
svchost.exe                   1244 Services                   0     13,360 K
svchost.exe                   1260 Services                   0      7,628 K
svchost.exe                   1288 Services                   0      5,812 K
svchost.exe                   1304 Services                   0     63,164 K
svchost.exe                   1336 Services                   0     11,660 K
Memory Compression            1452 Services                   0     15,176 K
svchost.exe                   1464 Services                   0      7,120 K
```

***/FI** flag is used to filter the processes, "**PID gt 700**" It is going to show processes having PID(process id) greater than 700*

Task 5:

```
C:\work\tools\SysinternalsSuite>pslist -x

PsList v1.4 - Process information lister
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Sysinternals - www.sysinternals.com

Process and thread information for DESKTOP-PG94K8K:

Name                Pid      VM      WS    Priv Priv Pk   Faults   NonP Page
Idle                  0       8       8      60      60        9      0    0
 Tid Pri    Cswtch           State     User Time   Kernel Time   Elapsed Time
   0   0    434774         Running  0:00:00.000   0:26:03.531    0:00:00.000
   0   0    816622         Running  0:00:00.000   0:23:46.890    0:00:00.000
   0   0    523241         Running  0:00:00.000   0:18:00.890    0:00:00.000

Name                Pid      VM      WS    Priv Priv Pk   Faults   NonP Page
System                4    3896     144     196     216     2545      0    0
 Tid Pri    Cswtch           State     User Time   Kernel Time   Elapsed Time
  12  15         1   Wait:Executive  0:00:00.000   0:00:00.000    0:00:00.000
  16  15         3   Wait:Executive  0:00:00.000   0:00:00.000    0:00:00.000
  20  13         5   Wait:Executive  0:00:00.000   0:00:00.000    0:00:00.000
  24  16      1110   Wait:Executive  0:00:00.000   0:00:00.046    0:00:00.000
  28  12        75   Wait:Executive  0:00:00.000   0:00:00.015    0:32:19.245
  36   9     13159       Wait:Queue  0:00:00.000   0:00:00.078    0:32:19.245
  40  31         1   Wait:Suspended  0:00:00.000   0:00:00.000    0:32:19.245
  44  31         1   Wait:Suspended  0:00:00.000   0:00:00.000    0:32:19.245
```
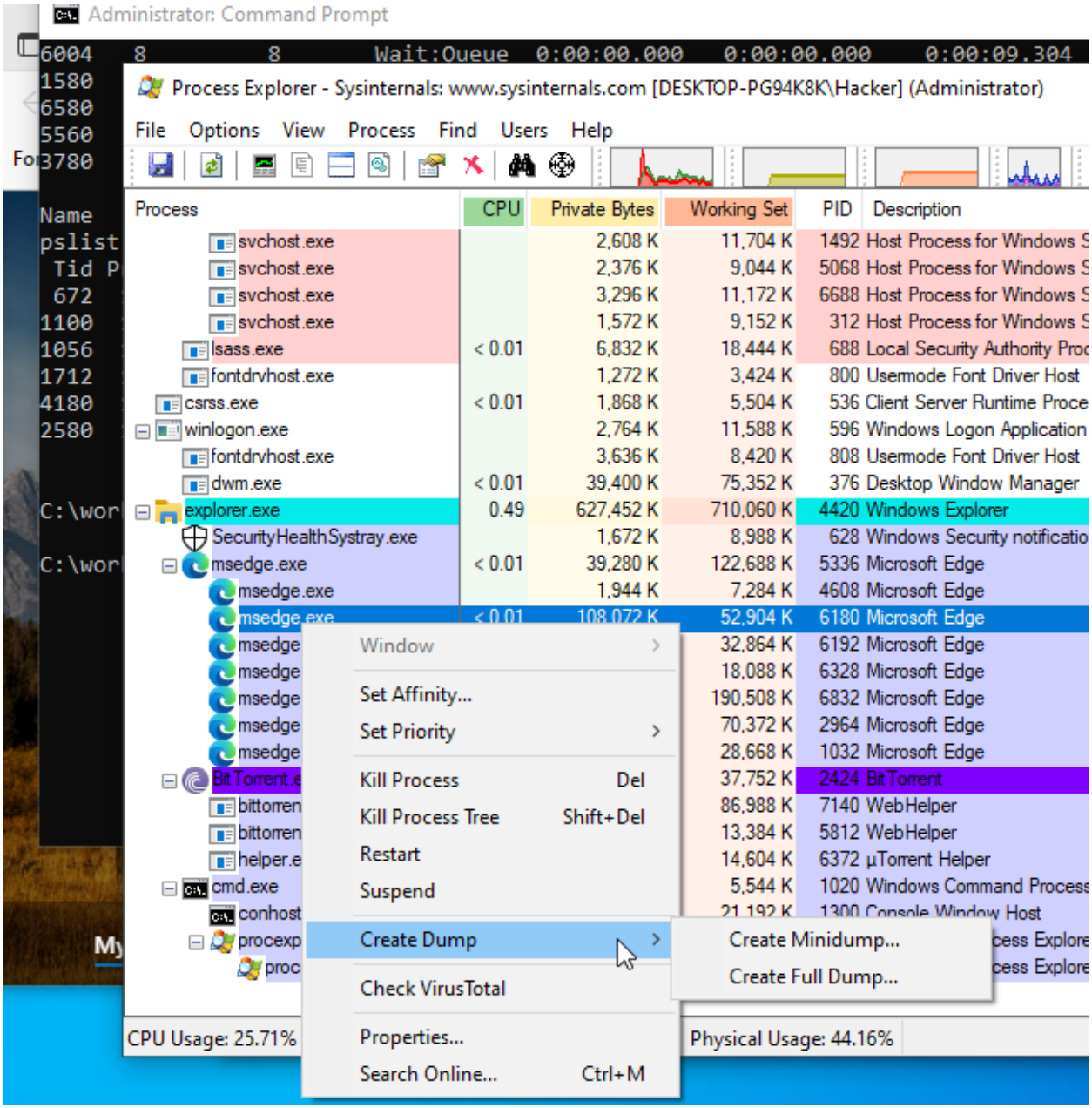
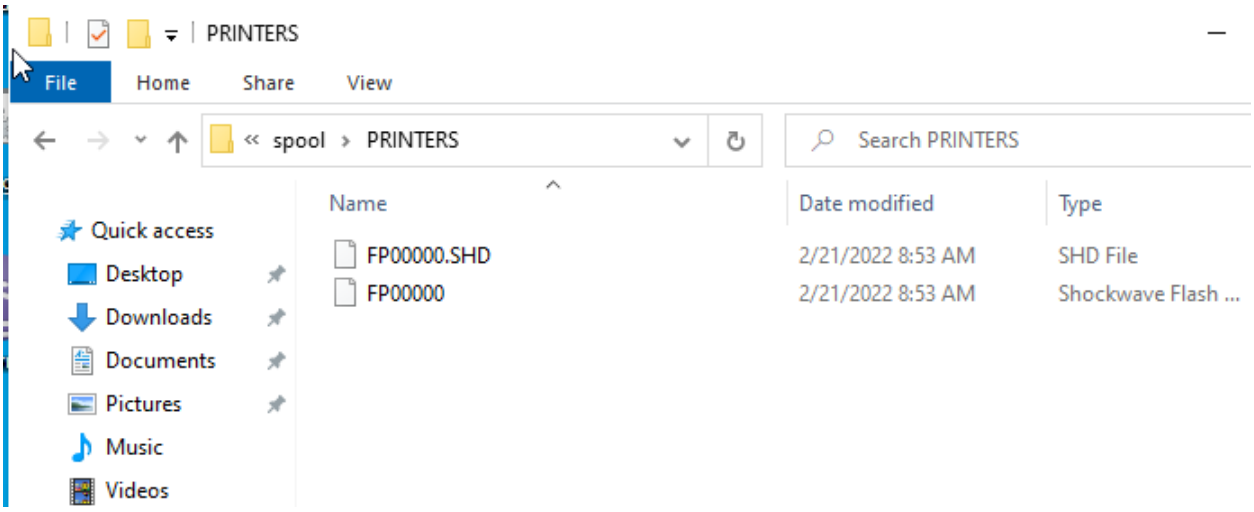

Pslist *is a tool that is used to display information about CPU usage and the processes running on the computer*



We can use the tool called ***procexp*** *that can create full memory dump of a single process which can used further in Malware Analysis*

Task 6:



In this step we only saw that printer's files are stored at this specific location

SUMMARY

This whole lab was about collecting volatile information. First of all, we saw how to check date and time and the user connected to the computer. After that we saw the network connections that are established with our computer using "netstat" command. We also got to know about "tasklist" , "pslist" commands that gave us information related to tasks and processes running on our Windows, At last we saw where our printer files are stored once they are printed.