

Operációs rendszerek BSc

2. Gyak.

2022. 02. 16.

Készítette:

Nagy Máté Bsc

Szak Programtervező informatikus

Neptunkód U3ROFS

Miskolc, 2022

Mivel a feladat leírásában, nem szerepelt hogy gitbash segítségével nem lehet ezért az első feladat a,b,c,d,e részét ezzel oldottam meg, viszont a // után megadtam a Windowsos formáját is a parancsoknak!!!

1.feladat

a) mkdir parancsal létrehoztam a mappákat// Windows md

```
Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216 (main)
$ mkdir bokor

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216 (main)
$ mkdir fa

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216 (main)
$ mkdir land

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216 (main)
$ cd bokor

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/bokor (main)
$ mkdir banan

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/bokor (main)
$ mkdir mogyoro

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/bokor (main)
$ mkdir barack

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/bokor (main)
$ cd -
/c/Users/Máté/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216 (main)
$ cd fa

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/fa (main)
$ mkdir korte

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/fa (main)
$ cd -
/c/Users/Máté/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216 (main)
$ cd land

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/land (main)
$ mkdir szeder

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/land (main)
$ mkdir kokusz

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/land (main)
$ cd -
/c/Users/Máté/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216

Máté@DESKTOP-2B50PUQ MINGW64 ~/Desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216 (main)
$
```

b) Átmásoltam a két mappát a `cp -r` parancsal // Windows xcopy /t

```
Máté@DESKTOP-2B50PUQ MINGW64 ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216 (main)
$ cp -r ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/land/szeder ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/fa/
```

```
Máté@DESKTOP-2B50PUQ MINGW64 ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216 (main)
$ cp -r ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/bokor/banan ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/fa/
```

c) az `mv` parancssal áthelyeztem a következő mappákat // Windows move

```
Máté@DESKTOP-2B50PUQ MINGW64 ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216 (main)
$ mv ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/bokor/barack ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/fa/
```

```
Máté@DESKTOP-2B50PUQ MINGW64 ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216 (main)
$ mv ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/land/kokusz ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/fa/
```

d) az `rmdir` parancsar töröltem a land mappát az alábbi módon //Windows
`rmdir`

```
Máté@DESKTOP-2B50PUQ MINGW64 ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216 (main)
$ rmdir ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/land/szeder
```

```
Máté@DESKTOP-2B50PUQ MINGW64 ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216 (main)
$ rmdir ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/land
```

Illetve létrehoztam az alábbi fájlokat a `cat` parancsal a következő .txt állományokat//Windows `type null > *.txt`

```
Máté@DESKTOP-2B50PUQ MINGW64 ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/fa/banan (main)
$ cat > leiras.txt
```

```
Máté@DESKTOP-2B50PUQ MINGW64 ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/fa (main)
$ cat > felsorolas.txt
```

e) Az átirányítás operátor `>` és az `echo` segítségével írtam a txt fileokba a szövegeket//Windows ugyanígy

```
Máté@DESKTOP-2B50PUQ MINGW64 ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/fa/banan (main)
$ echo -e "Sárga \nKicsi \nEheto"
Sárga
Kicsi
Eheto
```

```
Máté@DESKTOP-2B50PUQ MINGW64 ~/desktop/desk/repo/U3R0FS0sGyak/U3R0FS_0216/fa (main)
$ echo -e "SVanda \nKevin \nKristof \nViktor \nMatyi" > felsorolas.txt
```

f) A TREE parancsal kilistáztam a mappa tartalmát

```
C:\Users\Máté>TREE C:\Users\Máté\Desktop\Desk\repo\U3R0FS0sGyak\U3R0FS_0216
Folder PATH listing
Volume serial number is BA95-EDF1
C:\USERS\MÁTÉ\DESKTOP\DESK\REPO\U3R0FS0SGYAK\U3R0FS_0216
├── bokor
│   ├── banan
│   └── mogyoro
└── fa
    ├── banan
    ├── barack
    ├── kokusz
    ├── korte
    └── szeder
```

g) dir /s el kilistáztam azokat a karaktereket amelyeknek a második betűje e

```
C:\Users\Máté\Desktop\Desk>cd repo

C:\Users\Máté\Desktop\Desk\repo>cd U3R0FS0sGyak

C:\Users\Máté\Desktop\Desk\repo\U3R0FS0sGyak>cd U3R0FS_0216

C:\Users\Máté\Desktop\Desk\repo\U3R0FS0sGyak\U3R0FS_0216>dir /s "?e*"
Volume in drive C has no label.
Volume Serial Number is BA95-EDF1

Directory of C:\Users\Máté\Desktop\Desk\repo\U3R0FS0sGyak\U3R0FS_0216\bokor\banan

2022. 02. 16. 11:41          4 leiras.txt
                  1 File(s)          4 bytes

Directory of C:\Users\Máté\Desktop\Desk\repo\U3R0FS0sGyak\U3R0FS_0216\fa

2022. 02. 16. 12:15        38 felsorolas.txt
                  1 File(s)        38 bytes

Directory of C:\Users\Máté\Desktop\Desk\repo\U3R0FS0sGyak\U3R0FS_0216\fa\banan

2022. 02. 16. 12:11        21 leiras.txt
                  1 File(s)        21 bytes

Total Files Listed:
          3 File(s)          63 bytes
          0 Dir(s) 384 154 750 976 bytes free

C:\Users\Máté\Desktop\Desk\repo\U3R0FS0sGyak\U3R0FS_0216>S
```

h) icacls parancsal jogosultságot adtam a file olvasására

```
C:\Windows\system32>icacls C:\Users\Máté\Desktop\Desk\repo\U3R0FS0sGyak\U3R0FS_0216\fa\felsorolas.txt /grant Mindenki:r
processed file: C:\Users\Máté\Desktop\Desk\repo\U3R0FS0sGyak\U3R0FS_0216\fa\felsorolas.txt
Successfully processed 1 files; Failed processing 0 files
```

i) dir parancssal kiíratam a mappa méretét

```
Administrator: Parancssor
C:\Windows\system32>dir /s C:\Users\Máté\Desktop\Desk\repo\U3ROFS0sGyak\U3ROFS_0216
Volume in drive C has no label.
Volume Serial Number is BA95-EDF1

Directory of C:\Users\Máté\Desktop\Desk\repo\U3ROFS0sGyak\U3ROFS_0216

2022. 02. 16. 13:05 <DIR> .
2022. 02. 16. 10:48 <DIR> ..
2022. 02. 16. 11:24 <DIR> bokor
2022. 02. 16. 11:47 <DIR> fa
2022. 02. 16. 13:05 295 796 Örai_Jelentés_sablon.docx
1 File(s) 295 796 bytes

Directory of C:\Users\Máté\Desktop\Desk\repo\U3ROFS0sGyak\U3ROFS_0216\bokor

2022. 02. 16. 11:24 <DIR> .
2022. 02. 16. 13:05 <DIR> ..
2022. 02. 16. 11:35 <DIR> banan
2022. 02. 16. 10:51 <DIR> mogyoró
0 File(s) 0 bytes

Directory of C:\Users\Máté\Desktop\Desk\repo\U3ROFS0sGyak\U3ROFS_0216\bokor\banan

2022. 02. 16. 11:35 <DIR> .
2022. 02. 16. 11:24 <DIR> ..
2022. 02. 16. 11:41 4 leiras.txt
1 File(s) 4 bytes

Directory of C:\Users\Máté\Desktop\Desk\repo\U3ROFS0sGyak\U3ROFS_0216\bokor\mogyoró

2022. 02. 16. 10:51 <DIR> .
2022. 02. 16. 11:24 <DIR> ..
0 File(s) 0 bytes

Directory of C:\Users\Máté\Desktop\Desk\repo\U3ROFS0sGyak\U3ROFS_0216\fa

2022. 02. 16. 11:47 <DIR> .
2022. 02. 16. 13:05 <DIR> ..
2022. 02. 16. 11:44 <DIR> banan
2022. 02. 16. 10:51 <DIR> barack
2022. 02. 16. 12:15 38 felsorolas.txt
2022. 02. 16. 10:53 <DIR> kokusz
2022. 02. 16. 10:52 <DIR> korte
2022. 02. 16. 11:18 <DIR> szeder
1 File(s) 38 bytes

Directory of C:\Users\Máté\Desktop\Desk\repo\U3ROFS0sGyak\U3ROFS_0216\fa\banan

2022. 02. 16. 11:44 <DIR> .
```

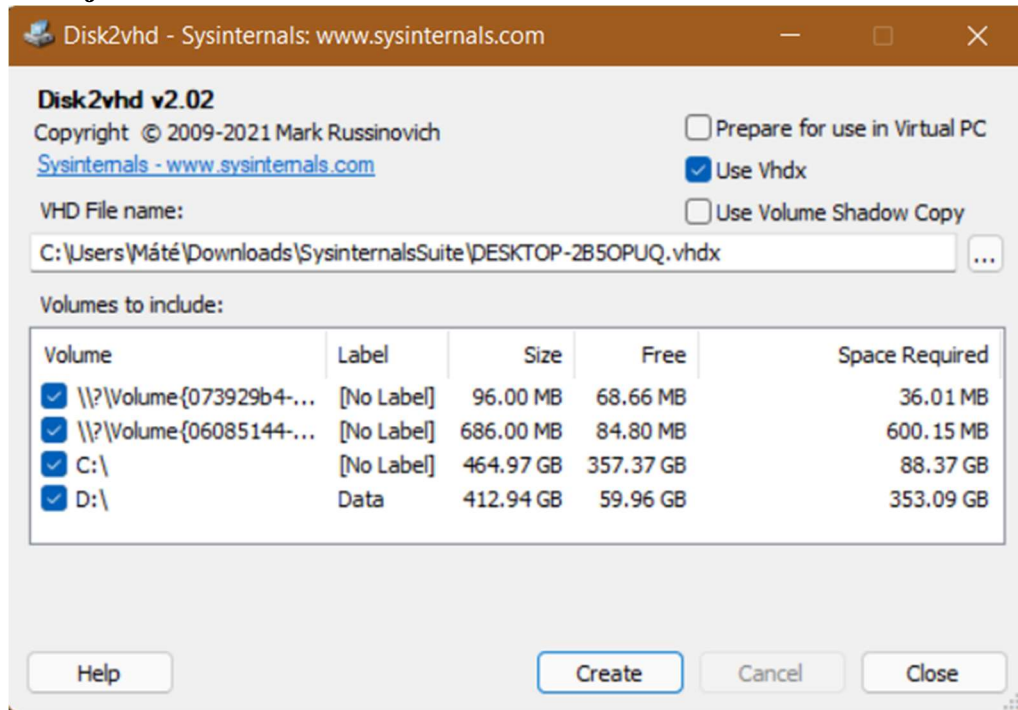
j) sort parancssal rendeztem a file tartalmát

```
C:\Windows\system32>sort C:\Users\Máté\Desktop\Desk\repo\U3ROFS0sGyak\U3ROFS_0216\fa\felsorolas.txt
Kevin
Kristof
Matyi
SVanda
Viktor

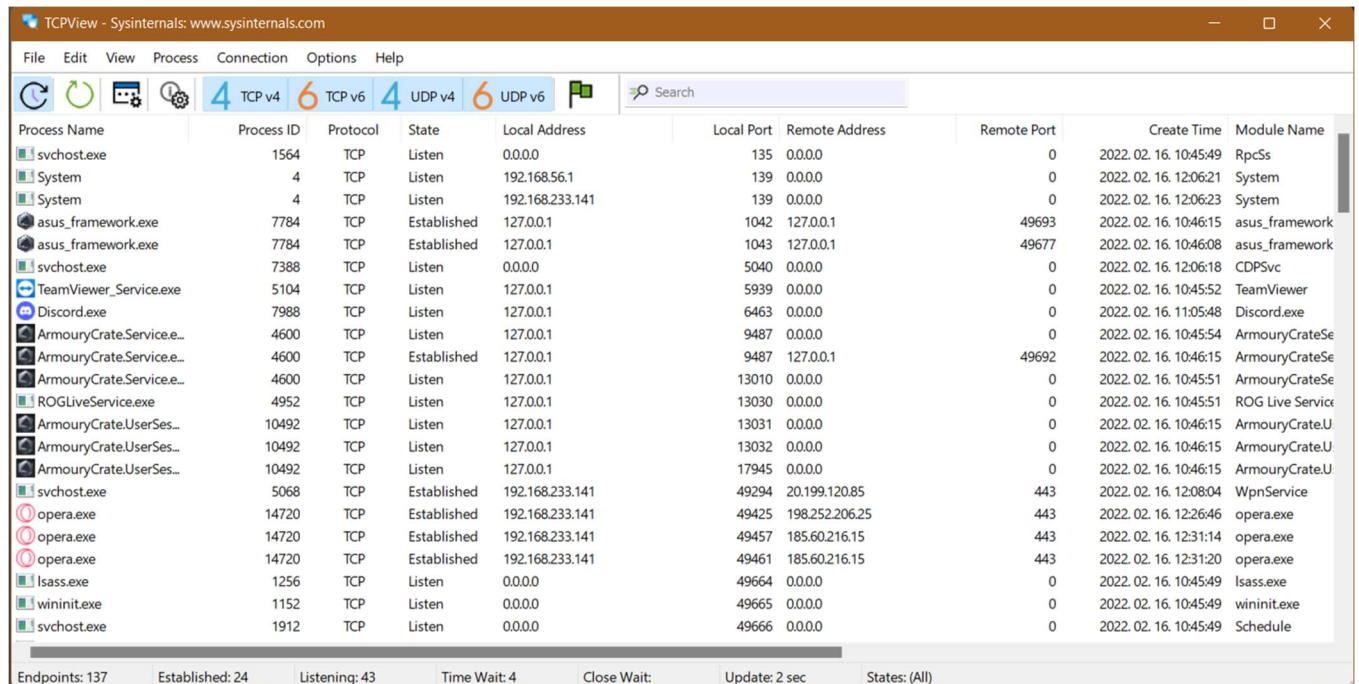
C:\Windows\system32>_
```


2. feladat

a) Létrehoz egy létező meghajtóból egy virtuális meghajtó fájlt .vhdx kiterjesztéssel



b) A hálózat forgalmát figyeli, valamint képes megjeleníteni a távoli ill. közeli címekeket.



c) A processzor kihasználtságot ill. a processzek erőforrás igényét méri

Process Explorer - Sysinternals: www.sysinternals.com [DESKTOP-2B50PUQ\Máté]

File Options View Process Find Users Help

<Filter by name>

Process	CPU	Private Bytes	Working Set	PID	Description	Company Name
Registry		7 984 K	85 556 K	240		
System Idle Process	94.24	60 K	8 K	0		
System	0.19	52 K	1 924 K	4		
Interrupts	< 0.01	0 K	0 K	n/a	Hardware Interrupts and DPCs	
smss.exe		1 076 K	1 308 K	692		
Memory Compression	< 0.01	496 K	64 716 K	3192		
csrss.exe	< 0.01	2 088 K	6 052 K	732		
wininit.exe		1 364 K	7 056 K	1152		
services.exe	0.19	6 632 K	17 220 K	1220		
svchost.exe	< 0.01	12 144 K	35 752 K	1440	Windows-szolgáltatások gaz...	Microsoft Corporation
WmiPrvSE.exe	< 0.01	2 588 K	9 800 K	3440		
SearchHost.exe	Susp...	162 152 K	228 672 K	8928		Microsoft Corporation
StartMenuExperienceHost.exe	< 0.01	44 068 K	81 760 K	9096		
RuntimeBroker.exe	< 0.01	14 920 K	51 640 K	8784	Runtime Broker	Microsoft Corporation
RuntimeBroker.exe		5 592 K	24 368 K	9340	Runtime Broker	Microsoft Corporation
dllhost.exe		5 848 K	16 736 K	10144	COM Surrogate	Microsoft Corporation
YourPhone.exe	Susp...	49 400 K	29 076 K	10248		Microsoft Corporation
dllhost.exe		3 312 K	11 752 K	11944		
RuntimeBroker.exe		2 888 K	20 080 K	12284	Runtime Broker	Microsoft Corporation
ShellExperienceHost.exe	Susp...	36 132 K	92 144 K	8992	Windows Shell Experience H...	Microsoft Corporation
RuntimeBroker.exe	< 0.01	5 908 K	27 724 K	10012	Runtime Broker	Microsoft Corporation
SystemSettingsBroker.exe		7 940 K	34 756 K	9936	System Settings Broker	Microsoft Corporation
unsecapp.exe		1 700 K	8 268 K	4516		
Widgets.exe		7 540 K	37 576 K	15576		Microsoft Corporation
msedgewebview2.exe	< 0.01	28 788 K	20 532 K	16984	Microsoft Edge WebView2	Microsoft Corporation
msedgewebview2.exe		1 944 K	7 732 K	1448	Microsoft Edge WebView2	Microsoft Corporation
msedgewebview2.exe	< 0.01	93 752 K	18 920 K	10008	Microsoft Edge WebView2	Microsoft Corporation
msedgewebview2.exe	< 0.01	10 048 K	32 988 K	15268	Microsoft Edge WebView2	Microsoft Corporation
msedgewebview2.exe	< 0.01	7 056 K	19 412 K	9204	Microsoft Edge WebView2	Microsoft Corporation
msedgewebview2.exe	< 0.01	91 068 K	70 416 K	2192	Microsoft Edge WebView2	Microsoft Corporation

CPU Usage: 6.68% Commit Charge: 51.80% Processes: 243

d) A bejelentkezési adatokat írja ki hogy melyik felhasználó mikor jelentkezett be az adott eszközre

```

      NBI:
      DM2 ROW9IU:
      GO8OU ZELALE:
      GO8OU FIWE:  S055' 05' J1' J4:J0:J8
      ZIQ:         2-J-2-30
      Z622IU:      0
      GO8OU FLBE:  ZELATCE
      VNGU B9CK9BE: HE8OFI946
      NZEL U9WE:   MOXKCKONb/DE2K1Ob-SB2ObnO2
[2] GO8OU Z622IU: 00000000:00000364:

      NBI:
      DM2 ROW9IU:
      GO8OU ZELALE:
      GO8OU FIWE:  S055' 05' J1' J4:J0:J8
      ZIQ:         2-J-2-J0
      Z622IU:      0
      GO8OU FLBE:  ZELATCE
      VNGU B9CK9BE: HE8OFI946
      NZEL U9WE:   NI VNIHOBTIA/HEFAI ZSOGCTGLV1T2
[4] GO8OU Z622IU: 00000000:00000362:

      NBI:
      DM2 ROW9IU:
      GO8OU ZELALE:
      GO8OU FIWE:  S055' 05' J1' J4:J0:J8
      ZIQ:         2-J-2-00-0-J
      Z622IU:      J
      GO8OU FLBE:  IUFEL9CFI46
      VNGU B9CK9BE: HE8OFI946
      NZEL U9WE:   EOUF DLIAEL H02F/NWED-J
[3] GO8OU Z622IU: 00000000:000I5J45:

      NBI:
      DM2 ROW9IU:
      GO8OU ZELALE:
      GO8OU FIWE:  S055' 05' J1' J4:J0:J8
      ZIQ:         2-J-2-00-0-0
      Z622IU:      0
      GO8OU FLBE:  IUFEL9CFI46
      VNGU B9CK9BE: HE8OFI946
      NZEL U9WE:   EOUF DLIAEL H02F/NWED-0
[5] GO8OU Z622IU: 00000000:000IJ994:

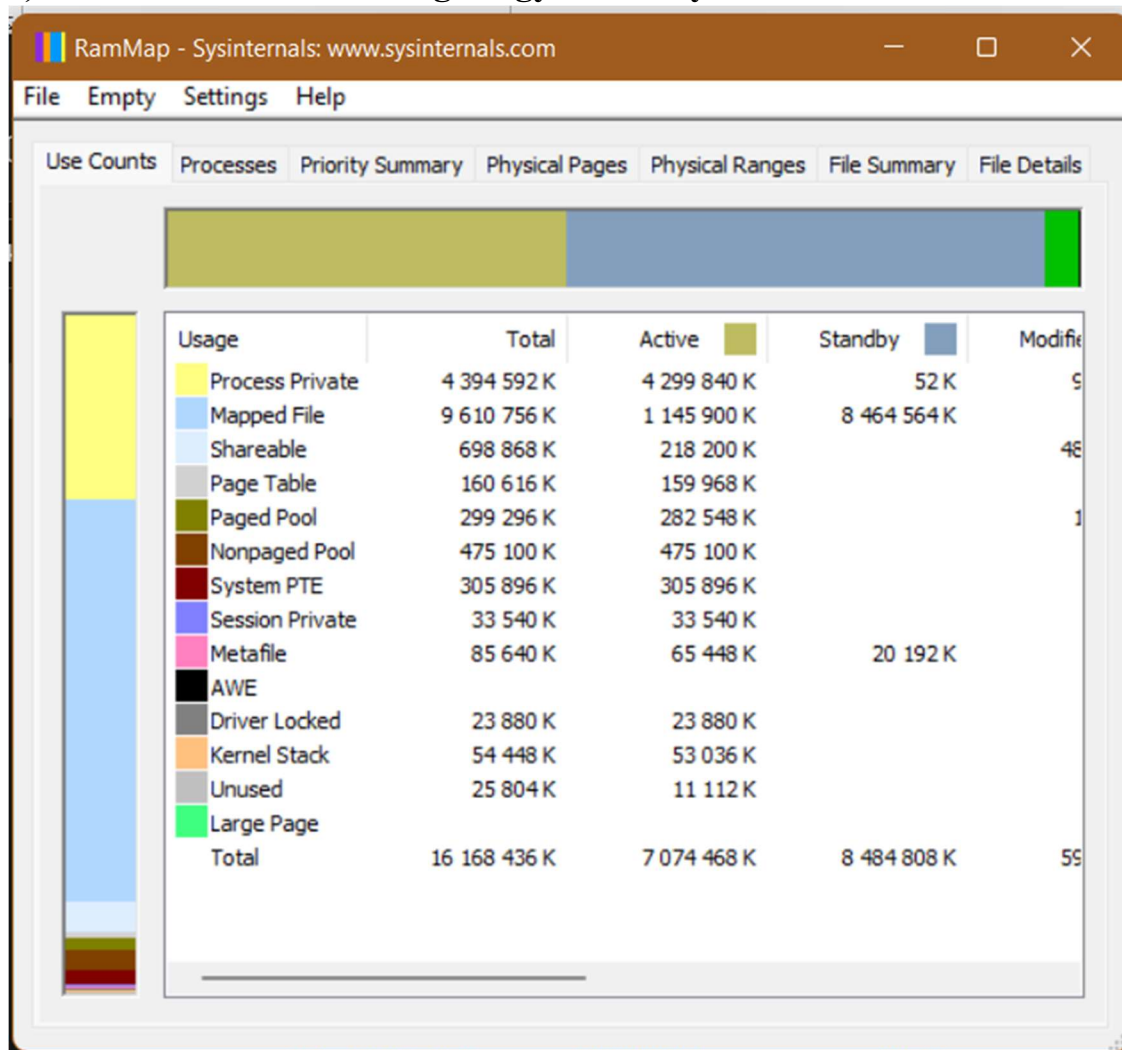
      NBI:
      DM2 ROW9IU:
      GO8OU ZELALE:
      GO8OU FIWE:  S055' 05' J1' J4:J0:J8
      ZIQ:         (UOU6)
      Z622IU:      0
      GO8OU FLBE:  (UOU6)
      VNGU B9CK9BE: NI1GW
      NZEL U9WE:
[7] GO8OU Z622IU: 00000000:000IJ8C0:

      NBI:
      DM2 ROW9IU:
      GO8OU ZELALE:
      GO8OU FIWE:  S055' 05' J1' J4:J0:J8
      ZIQ:         2-J-2-J8
      Z622IU:      0
      GO8OU FLBE:  (UOU6)
      VNGU B9CK9BE: NI1GW
      NZEL U9WE:   MOXKCKONb/DE2K1Ob-SB2ObnO2
[0] GO8OU Z622IU: 00000000:00000361:

```

öZr

e) A memória kihasználtságát figyeli osztályokra osztva.



PI	Ordinal ^	Hint	Function	Entry Point	
	8 (0x0008)	N/A	N/A	Not Bound	
	N/A	20 (0x0014)	CsrAllocateCaptureBuffer	Not Bound	
	N/A	21 (0x0015)	CsrAllocateMessagePointer	Not Bound	
	N/A	22 (0x0016)	CsrCaptureMessageBuffer	Not Bound	
	N/A	23 (0x0017)	CsrCaptureMessageMultiUnicodeStringsInPlace	Not Bound	
	N/A	26 (0x001A)	CsrClientCallServer	Not Bound	
	N/A	27 (0x001B)	CsrClientConnectToServer	Not Bound	

E	Ordinal ^	Hint	Function	Entry Point	
	8 (0x0008)	N/A	N/A	0x00084BF0	
	9 (0x0009)	0 (0x0000)	A_SHAFinal	0x00012AF0	
	10 (0x000A)	1 (0x0001)	A_SHAInit	0x00012C20	
	11 (0x000B)	2 (0x0002)	A_SHAUpdate	0x00012C60	
	12 (0x000C)	3 (0x0003)	AlpcAdjustCompletionListConcurrencyCount	0x000EBCC0	
	13 (0x000D)	4 (0x0004)	AlocFreeCompletionListMessage	0x00074880	