

Operációs rendszerek BSc

2. Gyak.

2022. 02. 15.

Készítette:

Boján Miron Noel Bsc

Programtervező informatikus

F4XQRO

Miskolc, 2022

1. feladat

a.)

```
Command Prompt
Volume Serial Number is D4A7-7617

Directory of C:\Users\TEMP.IIT\F4XQRO

2022. 02. 15. 15:36 <DIR>      .
2022. 02. 15. 15:36 <DIR>      ..
2022. 02. 15. 15:36 <DIR>      bokor
2022. 02. 15. 15:37 <DIR>      fa
2022. 02. 15. 15:38 <DIR>      land
0 File(s)              0 bytes

Directory of C:\Users\TEMP.IIT\F4XQRO\bokor

2022. 02. 15. 15:36 <DIR>      .
2022. 02. 15. 15:36 <DIR>      ..
2022. 02. 15. 15:36 <DIR>      banan
2022. 02. 15. 15:36 <DIR>      barack
2022. 02. 15. 15:36 <DIR>      mogyoro
0 File(s)              0 bytes

Directory of C:\Users\TEMP.IIT\F4XQRO\bokor\banan

2022. 02. 15. 15:36 <DIR>      .
2022. 02. 15. 15:36 <DIR>      ..
0 File(s)              0 bytes

Directory of C:\Users\TEMP.IIT\F4XQRO\bokor\barack

2022. 02. 15. 15:36 <DIR>      .
2022. 02. 15. 15:36 <DIR>      ..
0 File(s)              0 bytes

Directory of C:\Users\TEMP.IIT\F4XQRO\bokor\mogyoro

2022. 02. 15. 15:36 <DIR>      .
2022. 02. 15. 15:36 <DIR>      ..
0 File(s)              0 bytes

Directory of C:\Users\TEMP.IIT\F4XQRO\fa

2022. 02. 15. 15:37 <DIR>      .
2022. 02. 15. 15:37 <DIR>      ..
2022. 02. 15. 15:37 <DIR>      korte
0 File(s)              0 bytes

Directory of C:\Users\TEMP.IIT\F4XQRO\fa\korte

2022. 02. 15. 15:37 <DIR>      .
2022. 02. 15. 15:37 <DIR>      ..
0 File(s)              0 bytes

Directory of C:\Users\TEMP.IIT\F4XQRO\land

2022. 02. 15. 15:38 <DIR>      .
2022. 02. 15. 15:38 <DIR>      ..
2022. 02. 15. 15:38 <DIR>      kokusz
2022. 02. 15. 15:38 <DIR>      szeder
0 File(s)              0 bytes

Directory of C:\Users\TEMP.IIT\F4XQRO\land\kokusz

2022. 02. 15. 15:38 <DIR>      .
2022. 02. 15. 15:38 <DIR>      ..
```

b.)

```
Parancssor
2022. 02. 18. 19:21 <DIR>      F4XQRO_0208
2022. 02. 17. 22:06 <DIR>      F4XQRO_0215
0 File(s)              0 bytes
4 Dir(s) 19 584 098 304 bytes free

C:\Users\miron\OSGyak>cd F4XQRO_0215

C:\Users\miron\OSGyak\F4XQRO_0215>dir
Volume in drive C has no label.
Volume Serial Number is E681-C7CD

Directory of C:\Users\miron\OSGyak\F4XQRO_0215

2022. 02. 17. 22:06 <DIR>      .
2022. 02. 17. 22:06 <DIR>      ..
2022. 02. 17. 22:02 <DIR>      bokor
2022. 02. 17. 22:04 <DIR>      fa
2022. 02. 17. 22:04 <DIR>      land
0 File(s)              0 bytes
5 Dir(s) 19 583 188 992 bytes free

C:\Users\miron\OSGyak\F4XQRO_0215>xcopy C:\Users\miron\OSGyak\F4XQRO_0215\land\szeder C:\Users\miron\OSGyak\F4XQRO_0215\fa
0 File(s) copied

C:\Users\miron\OSGyak\F4XQRO_0215>copy C:\Users\miron\OSGyak\F4XQRO_0215\land\szeder C:\Users\miron\OSGyak\F4XQRO_0215\fa
C:\Users\miron\OSGyak\F4XQRO_0215>copy C:\Users\miron\OSGyak\F4XQRO_0215\land\szeder C:\Users\miron\OSGyak\F4XQRO_0215\fa
A rendszer nem találja a megadott fájlt.
0 file(s) copied.

C:\Users\miron\OSGyak\F4XQRO_0215>xcopy C:\Users\miron\OSGyak\F4XQRO_0215\land\szeder C:\Users\miron\OSGyak\F4XQRO_0215\fa
0 File(s) copied

C:\Users\miron\OSGyak\F4XQRO_0215>xcopy C:\Users\miron\OSGyak\F4XQRO_0215\bokor\banan C:\Users\miron\OSGyak\F4XQRO_0215\fa
0 File(s) copied

C:\Users\miron\OSGyak\F4XQRO_0215>
```

c.)

```
Parancssor
2022. 02. 10. 19:21 <DIR> F4XQR0_0208
2022. 02. 17. 22:06 <DIR> F4XQR0_0215
0 File(s) 0 bytes
4 Dir(s) 19 584 098 304 bytes free

C:\Users\miron\OSGyak>cd F4XQR0_0215

C:\Users\miron\OSGyak\F4XQR0_0215>dir
Volume in drive C has no label.
Volume Serial Number is E681-C7CD

Directory of C:\Users\miron\OSGyak\F4XQR0_0215

2022. 02. 17. 22:06 <DIR> .
2022. 02. 17. 22:06 <DIR> ..
2022. 02. 17. 22:02 <DIR> bokor
2022. 02. 17. 22:04 <DIR> fa
2022. 02. 17. 22:04 <DIR> land
0 File(s) 0 bytes
5 Dir(s) 19 583 188 992 bytes free

C:\Users\miron\OSGyak\F4XQR0_0215>xcopy C:\Users\miron\OSGyak\F4XQR0_0215\land\szeder C:\Users\miron\OSGyak\F4XQR0_0215\fa
0 File(s) copied

C:\Users\miron\OSGyak\F4XQR0_0215>copy C:\Users\miron\OSGyak\F4XQR0_0215\land\szeder C:\Users\miron\OSGyak\F4XQR0_0215\fa
C:\Users\miron\OSGyak\F4XQR0_0215\land\szeder\*
A rendszer nem találja a megadott fájlt.
0 file(s) copied.

C:\Users\miron\OSGyak\F4XQR0_0215>xcopy C:\Users\miron\OSGyak\F4XQR0_0215\land\szeder C:\Users\miron\OSGyak\F4XQR0_0215\fa
0 File(s) copied

C:\Users\miron\OSGyak\F4XQR0_0215>xcopy C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan C:\Users\miron\OSGyak\F4XQR0_0215\fa
0 File(s) copied

C:\Users\miron\OSGyak\F4XQR0_0215>move C:\Users\miron\OSGyak\F4XQR0_0215\bokor\barack C:\Users\miron\OSGyak\F4XQR0_0215\fa
1 dir(s) moved.

C:\Users\miron\OSGyak\F4XQR0_0215>move C:\Users\miron\OSGyak\F4XQR0_0215\land\kokusz C:\Users\miron\OSGyak\F4XQR0_0215\fa
1 dir(s) moved.

C:\Users\miron\OSGyak\F4XQR0_0215>
```

d.)

```
Parancssor

C:\Users\miron\OSGyak\F4XQR0_0215\land>cd ..

C:\Users\miron\OSGyak\F4XQR0_0215>rmdir land
A könyvtár nem üres.

C:\Users\miron\OSGyak\F4XQR0_0215>rm land
'rm' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\miron\OSGyak\F4XQR0_0215>rmdir -r land
A rendszer nem találja a megadott fájlt.
A könyvtár nem üres.

C:\Users\miron\OSGyak\F4XQR0_0215>rf land
'rf' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\miron\OSGyak\F4XQR0_0215>rmdir -rf land
A rendszer nem találja a megadott fájlt.
A könyvtár nem üres.

C:\Users\miron\OSGyak\F4XQR0_0215>rmdir -rf C:\Users\miron\OSGyak\F4XQR0_0215\land
A rendszer nem találja a megadott fájlt.
A könyvtár nem üres.

C:\Users\miron\OSGyak\F4XQR0_0215>rmdir /s land
land, Are you sure (Y/N)? y

C:\Users\miron\OSGyak\F4XQR0_0215>
```

```
Parancssor
C:\Users\miron\OSGyak\F4XQR0_0215\land>cd ..
C:\Users\miron\OSGyak\F4XQR0_0215>mkdir land
A könyvtár nem üres.

C:\Users\miron\OSGyak\F4XQR0_0215>rm -r land
'rm' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\miron\OSGyak\F4XQR0_0215>mkdir -r land
A rendszer nem találja a megadott fájlt.
A könyvtár nem üres.

C:\Users\miron\OSGyak\F4XQR0_0215>rm -rf land
'rm' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\miron\OSGyak\F4XQR0_0215>mkdir -rf land
A rendszer nem találja a megadott fájlt.
A könyvtár nem üres.

C:\Users\miron\OSGyak\F4XQR0_0215>mkdir -rf C:\Users\miron\OSGyak\F4XQR0_0215\land
A rendszer nem találja a megadott fájlt.
A könyvtár nem üres.

C:\Users\miron\OSGyak\F4XQR0_0215>mkdir /s land
Land, Are you sure (Y/N)? y

C:\Users\miron\OSGyak\F4XQR0_0215>cd bokor
C:\Users\miron\OSGyak\F4XQR0_0215\bokor>cd banan
C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>type nul > leiras.txt
C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>cd ..
C:\Users\miron\OSGyak\F4XQR0_0215\bokor>cd..
C:\Users\miron\OSGyak\F4XQR0_0215>cd fa
C:\Users\miron\OSGyak\F4XQR0_0215\fa>type nul > felsorolas.txt
C:\Users\miron\OSGyak\F4XQR0_0215\fa>
```

e.)

```
Parancssor
2 Dir(s) 19 575 939 072 bytes free

C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>micro leiras.txt
'micro' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>edit leiras.txt
'edit' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>edit leiras
'edit' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>notepad leiras
C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>copy con leiras.txt
Legkozelebbi rokona a mandula
Overwrite leiras.txt? (Yes/No/All): n
0 file(s) copied.

C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>copy con leiras.txt
Legkozelebbi rokona a mandula
Overwrite leiras.txt? (Yes/No/All): y
Tavollobbi rokonai a szilva és a kajszibarack
kétszikkü
1 file(s) copied.

C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>
```

```
Parancssor
C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>edit leiras
'edit' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>notepad leiras

C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>copy con leiras.txt
legkozelebbi rokona a mandula
Overwrite leiras.txt? (Yes/No/All): n
0 file(s) copied.

C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>copy con leiras.txt
legkozelebbi rokona a mandula
Overwrite leiras.txt? (Yes/No/All): y
távolabbi rokonai a szilva és a kajszibarack

kétszikű
1 file(s) copied.

C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>cd ..

C:\Users\miron\OSGyak\F4XQR0_0215\bokor>cd..

C:\Users\miron\OSGyak\F4XQR0_0215>cd fa

C:\Users\miron\OSGyak\F4XQR0_0215>fsdir
Volume in drive C has no label.
Volume Serial Number is E681-C7CD

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\fa

2022. 02. 17. 22:41 <DIR>      .
2022. 02. 17. 22:41 <DIR>      ..
2022. 02. 17. 22:02 <DIR>      barack
2022. 02. 17. 22:41      0 felsorolas.txt
2022. 02. 17. 22:04 <DIR>      kokusz
2022. 02. 17. 22:04 <DIR>      korte
1 File(s)              0 bytes
5 Dir(s)      19 604 463 616 bytes free

C:\Users\miron\OSGyak\F4XQR0_0215\fa>copy con felsorolas.txt
Klecskő Bence
Overwrite felsorolas.txt? (Yes/No/All): y
Frembeczki Dávid
Bajzráth Áron József
Soltész Bence
Hegedűs Tamás
1 file(s) copied.

C:\Users\miron\OSGyak\F4XQR0_0215\fa>
```

f.)

```
Parancssor
C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>cd ..

C:\Users\miron\OSGyak\F4XQR0_0215\bokor>cd..

C:\Users\miron\OSGyak\F4XQR0_0215>cd fa

C:\Users\miron\OSGyak\F4XQR0_0215>fsdir
Volume in drive C has no label.
Volume Serial Number is E681-C7CD

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\fa

2022. 02. 17. 22:41 <DIR>      .
2022. 02. 17. 22:41 <DIR>      ..
2022. 02. 17. 22:02 <DIR>      barack
2022. 02. 17. 22:41      0 felsorolas.txt
2022. 02. 17. 22:04 <DIR>      kokusz
2022. 02. 17. 22:04 <DIR>      korte
1 File(s)              0 bytes
5 Dir(s)      19 604 463 616 bytes free

C:\Users\miron\OSGyak\F4XQR0_0215\fa>copy con felsorolas.txt
Klecskő Bence
Overwrite felsorolas.txt? (Yes/No/All): y
Frembeczki Dávid
Bajzráth Áron József
Soltész Bence
Hegedűs Tamás
1 file(s) copied.

C:\Users\miron\OSGyak\F4XQR0_0215\fa>cd C:\Users\miron\OSGyak\F4XQR0_0215\bokor
C:\Users\miron\OSGyak\F4XQR0_0215\bokor>
C:\Users\miron\OSGyak\F4XQR0_0215\fa>cd C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan
C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>
C:\Users\miron\OSGyak\F4XQR0_0215\fa>cd C:\Users\miron\OSGyak\F4XQR0_0215\fa\barack
C:\Users\miron\OSGyak\F4XQR0_0215\fa\barack>
C:\Users\miron\OSGyak\F4XQR0_0215\fa>cd C:\Users\miron\OSGyak\F4XQR0_0215\fa\kokusz
C:\Users\miron\OSGyak\F4XQR0_0215\fa\kokusz>
C:\Users\miron\OSGyak\F4XQR0_0215\fa>cd C:\Users\miron\OSGyak\F4XQR0_0215\fa\korte
C:\Users\miron\OSGyak\F4XQR0_0215\fa\korte>
C:\Users\miron\OSGyak\F4XQR0_0215\fa>cd C:\Users\miron\OSGyak\F4XQR0_0215\bokor
C:\Users\miron\OSGyak\F4XQR0_0215\bokor>
C:\Users\miron\OSGyak\F4XQR0_0215\fa>cd C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan
C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan>
C:\Users\miron\OSGyak\F4XQR0_0215\fa>cd C:\Users\miron\OSGyak\F4XQR0_0215\bokor\moggyoro
C:\Users\miron\OSGyak\F4XQR0_0215\bokor\moggyoro>
C:\Users\miron\OSGyak\F4XQR0_0215\fa>cd C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan\leiras.txt
C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan\leiras.txt>
C:\Users\miron\OSGyak\F4XQR0_0215\fa>cd C:\Users\miron\OSGyak\F4XQR0_0215\fa\barack
C:\Users\miron\OSGyak\F4XQR0_0215\fa\barack>
C:\Users\miron\OSGyak\F4XQR0_0215\fa>cd C:\Users\miron\OSGyak\F4XQR0_0215\fa\kokusz
C:\Users\miron\OSGyak\F4XQR0_0215\fa\kokusz>
C:\Users\miron\OSGyak\F4XQR0_0215\fa>cd C:\Users\miron\OSGyak\F4XQR0_0215\fa\korte
C:\Users\miron\OSGyak\F4XQR0_0215\fa\korte>
C:\Users\miron\OSGyak\F4XQR0_0215\fa>
```

g.)

```
Parancssor

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\bokor\megyoro
2022. 02. 17. 22:02 <DIR>      .
2022. 02. 17. 22:02 <DIR>      ..
                0 File(s)      0 bytes

    Total Files Listed:
    1 File(s)      89 bytes
    8 Dir(s)  19 615 641 680 bytes free

C:\Users\miron\OSGyak\F4XQR0_0215>dir /s **e**
Volume in drive C has no label.
Volume Serial Number is E681-C7CD

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan
2022. 02. 17. 22:49          89 leiras.txt
                1 File(s)      89 bytes

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\fa
2022. 02. 17. 22:55          69 felsorolas.txt
2022. 02. 17. 22:04 <DIR>      korte
                1 File(s)      69 bytes

    Total Files Listed:
    2 File(s)     158 bytes
    1 Dir(s)  19 586 885 760 bytes free

C:\Users\miron\OSGyak\F4XQR0_0215>dir /s *e*
Volume in drive C has no label.
Volume Serial Number is E681-C7CD

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan
2022. 02. 17. 22:49          89 leiras.txt
                1 File(s)      89 bytes

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\fa
2022. 02. 17. 22:55          69 felsorolas.txt
2022. 02. 17. 22:04 <DIR>      korte
                1 File(s)      69 bytes

    Total Files Listed:
    2 File(s)     158 bytes
    1 Dir(s)  19 586 953 216 bytes free

C:\Users\miron\OSGyak\F4XQR0_0215>
```

h.)

```
Parancssor

2022. 02. 17. 22:41 <DIR>      fa
                0 File(s)      0 bytes
                4 Dir(s)  19 531 214 848 bytes free

C:\Users\miron\OSGyak\F4XQR0_0215>cd bokor
C:\Users\miron\OSGyak\F4XQR0_0215\bokor>dir
Volume in drive C has no label.
Volume Serial Number is E681-C7CD

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\bokor
2022. 02. 17. 22:24 <DIR>      .
2022. 02. 17. 22:24 <DIR>      ..
2022. 02. 17. 22:40 <DIR>      banan
2022. 02. 17. 22:02 <DIR>      megyoro
                0 File(s)      0 bytes
                4 Dir(s)  19 532 390 480 bytes free

C:\Users\miron\OSGyak\F4XQR0_0215\bokor>cd ..
C:\Users\miron\OSGyak\F4XQR0_0215>cd fa
C:\Users\miron\OSGyak\F4XQR0_0215\fa>dir
Volume in drive C has no label.
Volume Serial Number is E681-C7CD

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\fa
2022. 02. 17. 22:41 <DIR>      .
2022. 02. 17. 22:41 <DIR>      ..
2022. 02. 17. 22:02 <DIR>      barack
2022. 02. 17. 22:55          69 felsorolas.txt
2022. 02. 17. 22:04 <DIR>      kokusz
2022. 02. 17. 22:04 <DIR>      korte
                1 File(s)      69 bytes
                5 Dir(s)  19 532 115 968 bytes free

C:\Users\miron\OSGyak\F4XQR0_0215\fa>icacls "c:\Users\miron\OSGyak\F4XQR0_0215\fa\felsorolas.txt" /q /c /t /grant Users:F
Users: A fióknevek és a biztonsági azonosítók között nem jött létre egymáshoz rendelés.
Successfully processed 0 files; Failed processing 1 files

C:\Users\miron\OSGyak\F4XQR0_0215\fa>icacls "c:\Users\miron\OSGyak\F4XQR0_0215\fa\felsorolas.txt" /q /c /t /grant miron:F
Successfully processed 1 files; Failed processing 0 files

C:\Users\miron\OSGyak\F4XQR0_0215\fa>icacls "c:\Users\miron\OSGyak\F4XQR0_0215\fa\felsorolas.txt" /q /c /t /grant Everyone:F
Everyone: A fióknevek és a biztonsági azonosítók között nem jött létre egymáshoz rendelés.
Successfully processed 0 files; Failed processing 1 files

C:\Users\miron\OSGyak\F4XQR0_0215\fa>
```

i.)

```
Parancssor
2022. 02. 17. 22:40 <DIR>        banan
2022. 02. 17. 22:02 <DIR>        mogyoro
0 File(s)          0 bytes

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\bokor\banan
2022. 02. 17. 22:40 <DIR>        .
2022. 02. 17. 22:40 <DIR>        ..
2022. 02. 17. 22:49        89 leiras.txt
1 File(s)          89 bytes

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\bokor\mogyoro
2022. 02. 17. 22:02 <DIR>        .
2022. 02. 17. 22:02 <DIR>        ..
0 File(s)          0 bytes

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\fa
2022. 02. 17. 22:41 <DIR>        .
2022. 02. 17. 22:41 <DIR>        ..
2022. 02. 17. 22:02 <DIR>        barack
2022. 02. 17. 22:55        69 felsorolas.txt
2022. 02. 17. 22:04 <DIR>        kokusz
2022. 02. 17. 22:04 <DIR>        korte
1 File(s)          69 bytes

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\fa\barack
2022. 02. 17. 22:02 <DIR>        .
2022. 02. 17. 22:02 <DIR>        ..
0 File(s)          0 bytes

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\fa\kokusz
2022. 02. 17. 22:04 <DIR>        .
2022. 02. 17. 22:04 <DIR>        ..
0 File(s)          0 bytes

Directory of C:\Users\miron\OSGyak\F4XQR0_0215\fa\korte
2022. 02. 17. 22:04 <DIR>        .
2022. 02. 17. 22:04 <DIR>        ..
0 File(s)          0 bytes

Total Files Listed:
2 File(s)          158 bytes
23 Dir(s)  19 534 483 456 bytes free

C:\Users\miron\OSGyak\F4XQR0_0215>
```

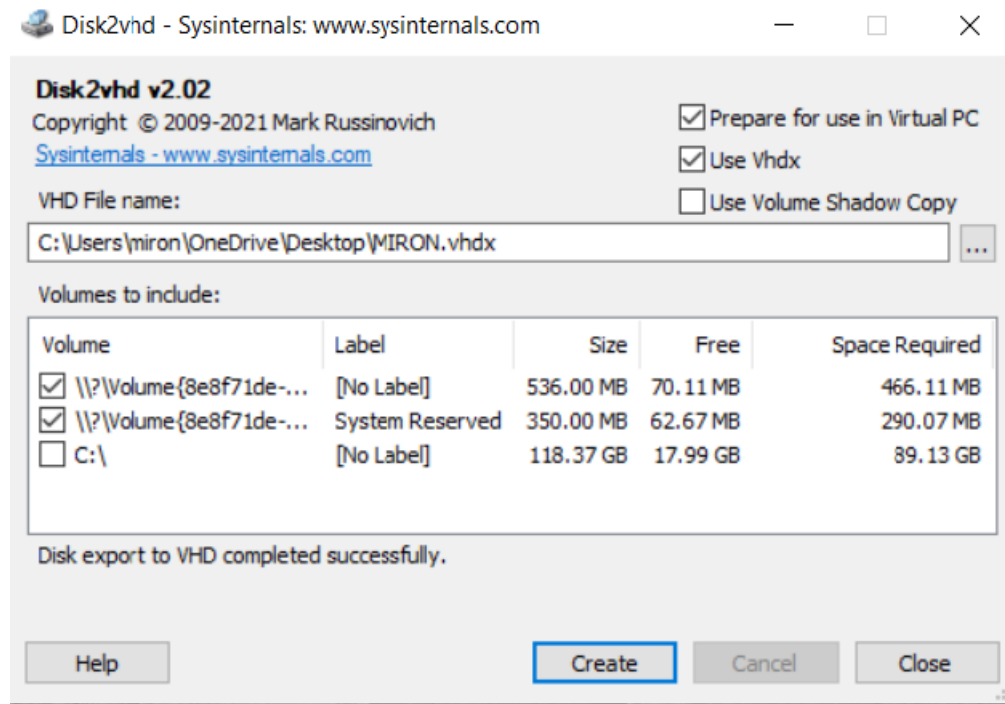
j.)

```
Parancssor
C:\Users\miron\OSGyak\F4XQR0_0215\fa>sort C:\Users\miron\OSGyak\F4XQR0_0215\fa\felsorolas.txt
Bajzátó Áron József
Klecskó Bence
Soltész Bence
Trembeczki Dávid

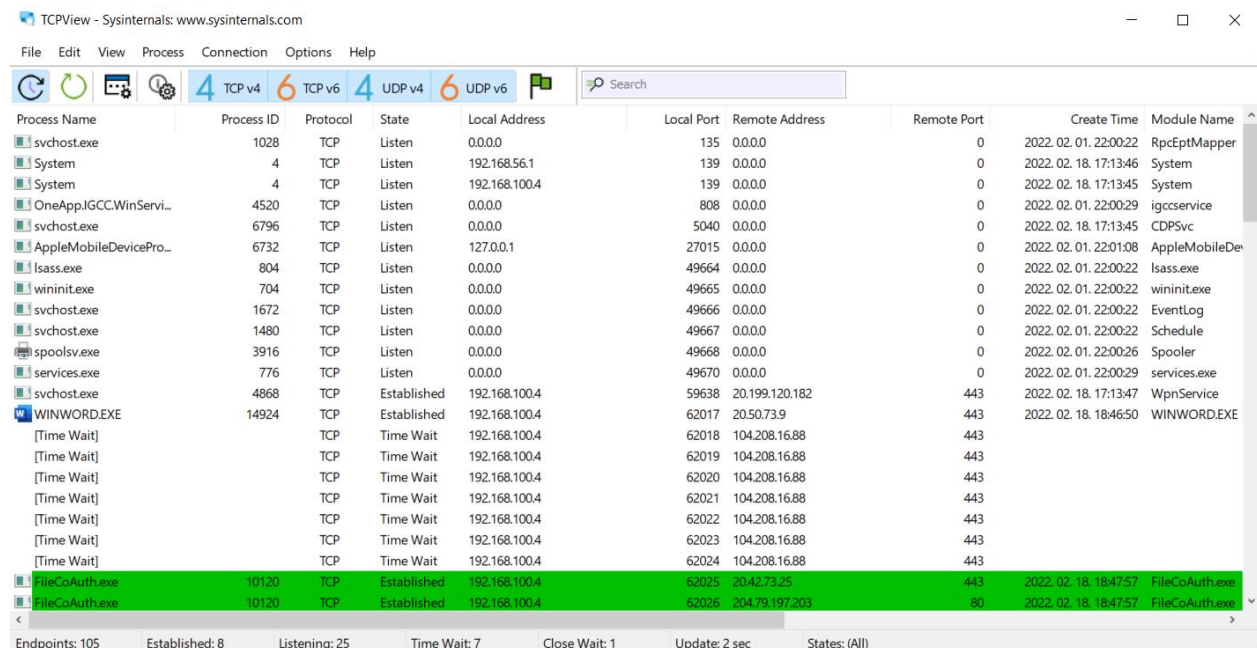
C:\Users\miron\OSGyak\F4XQR0_0215\fa>
```

2. feladat

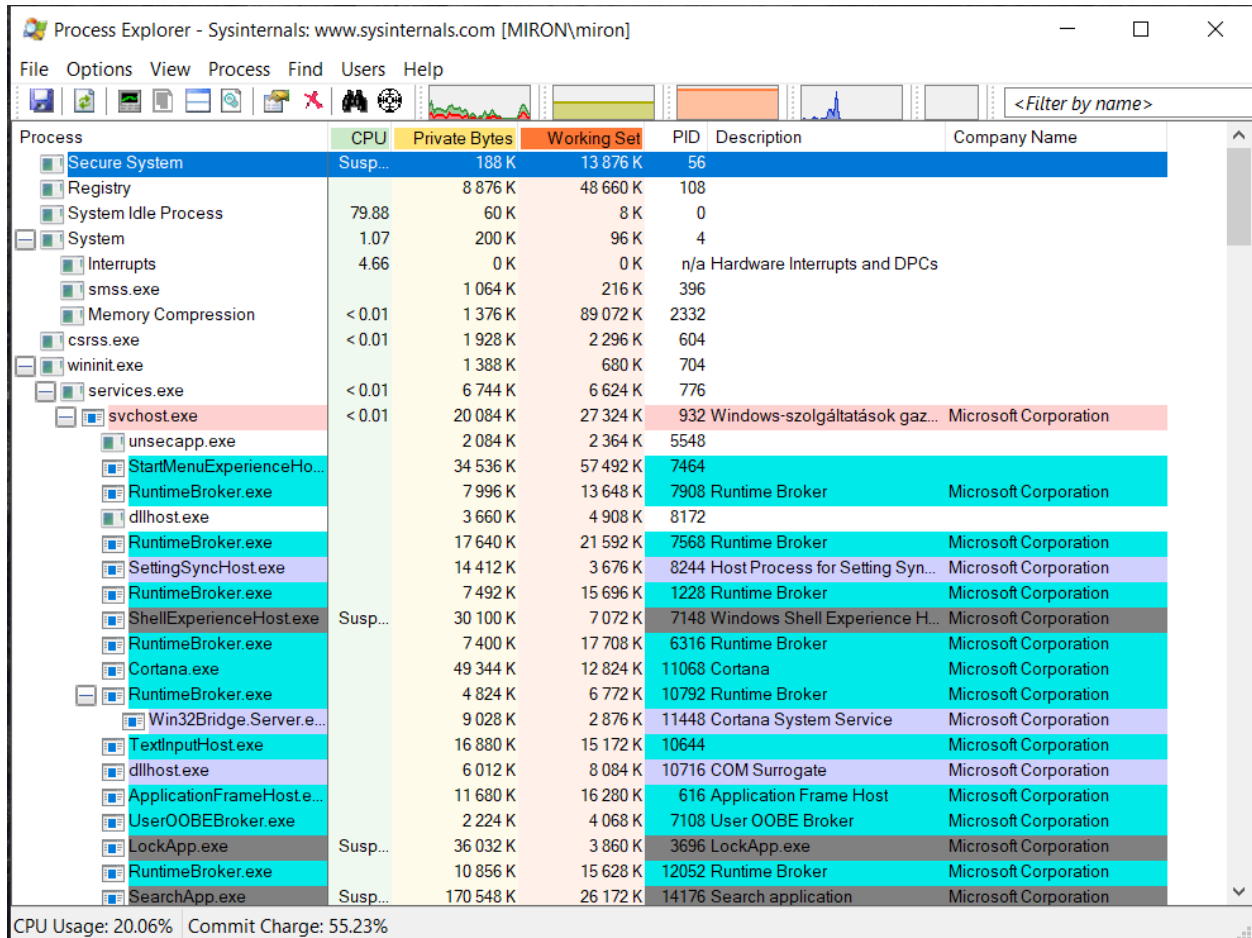
a.) A Disk2vhd egy olyan segédprogram, amely létrehozza a fizikai lemezek, virtuális merevlemez verzióit.



b.) A TCPView egy Windows program, amely részletes listában mutatja be a rendszer összes TCP- és UDP-végpontját.



c.) A Pocces Explorer egyedi képességei hasznosak a DLL-verzióproblémák nyomon követéséhez vagy a szivárgások kezeléséhez, és betekintést nyújtanak a Windows és alkalmazásokba.



Process Explorer - Sysinternals: www.sysinternals.com [MIRON\miron]

File Options View Process Find Users Help

<Filter by name>

Process	CPU	Private Bytes	Working Set	PID	Description	Company Name
Secure System	Susp...	188 K	13 876 K	56		
Registry		8 876 K	48 660 K	108		
System Idle Process	79.88	60 K	8 K	0		
System	1.07	200 K	96 K	4		
Interrupts	4.66	0 K	0 K	n/a	Hardware Interrupts and DPCs	
smss.exe		1 064 K	216 K	396		
Memory Compression	< 0.01	1 376 K	89 072 K	2332		
csrss.exe	< 0.01	1 928 K	2 296 K	604		
wininit.exe		1 388 K	680 K	704		
services.exe	< 0.01	6 744 K	6 624 K	776		
svchost.exe	< 0.01	20 084 K	27 324 K	932	Windows-szolgáltatások gaz...	Microsoft Corporation
unsecapp.exe		2 084 K	2 364 K	5548		
StartMenuExperienceHo...		34 536 K	57 492 K	7464		
RuntimeBroker.exe		7 996 K	13 648 K	7908	Runtime Broker	Microsoft Corporation
dllhost.exe		3 660 K	4 908 K	8172		
RuntimeBroker.exe		17 640 K	21 592 K	7568	Runtime Broker	Microsoft Corporation
SettingSyncHost.exe		14 412 K	3 676 K	8244	Host Process for Setting Syn...	Microsoft Corporation
RuntimeBroker.exe		7 492 K	15 696 K	1228	Runtime Broker	Microsoft Corporation
ShellExperienceHost.exe	Susp...	30 100 K	7 072 K	7148	Windows Shell Experience H...	Microsoft Corporation
RuntimeBroker.exe		7 400 K	17 708 K	6316	Runtime Broker	Microsoft Corporation
Cortana.exe		49 344 K	12 824 K	11068	Cortana	Microsoft Corporation
RuntimeBroker.exe		4 824 K	6 772 K	10792	Runtime Broker	Microsoft Corporation
Win32Bridge.Server.e...		9 028 K	2 876 K	11448	Cortana System Service	Microsoft Corporation
TextInputHost.exe		16 880 K	15 172 K	10644		Microsoft Corporation
dllhost.exe		6 012 K	8 084 K	10716	COM Surrogate	Microsoft Corporation
ApplicationFrameHost.e...		11 680 K	16 280 K	616	Application Frame Host	Microsoft Corporation
UserOOBEBroker.exe		2 224 K	4 068 K	7108	User OOBEBroker	Microsoft Corporation
LockApp.exe	Susp...	36 032 K	3 860 K	3696	LockApp.exe	Microsoft Corporation
RuntimeBroker.exe		10 856 K	15 628 K	12052	Runtime Broker	Microsoft Corporation
SearchApp.exe	Susp...	170 548 K	26 172 K	14176	Search application	Microsoft Corporation

CPU Usage: 20.06% Commit Charge: 55.23%

A Process monitor egy fejlett monitorozási eszköz Windows, amely valós idejű fájlrendszer-, beállításjegyzék- és folyamat-/száltevékenységet mutat be

The screenshot displays the Windows Process Monitor application window. The title bar reads "Process Monitor - Sysinternals.com www.sysinternals.com". The menu bar includes File, Edit, Event, Filter, Tools, Options, and Help. Below the menu is a toolbar with various icons representing different types of events and filters. The main pane shows a log of system events.

Time	Process Name	PID	Operation	Path	Result	Detail
18:56:14	dwm.exe	1208	ReadFile	C:\Windows\System32\ISM.dll	SUCCESS	Offset 2 212 864. Len...
18:56:14	dwm.exe	1208	ReadFile	C:\Windows\System32\ISM.dll	SUCCESS	Offset 2 171 904. Len...
18:56:14	svchost.exe	2096	ReadFile	C:\Windows\System32\StateRepository...	SUCCESS	Offset 690 688. Len...
18:56:14	dwm.exe	1208	ReadFile	C:\Windows\System32\ISM.dll	SUCCESS	Offset 2 147 328. Len...
18:56:14	dwm.exe	1208	ReadFile	C:\Windows\System32\ISM.dll	SUCCESS	Offset 2 130 944. Len...
18:56:14	dwm.exe	1208	ReadFile	C:\Windows\System32\ISM.dll	SUCCESS	Offset 2 028 032. Len...
18:56:14	Explorer.EXE	6268	ReadFile	C:\Windows\System32\AppResolver.dll	SUCCESS	Offset 530 944. Len...
18:56:14	dwm.exe	1208	NotifyChangedDi...	C:\Windows\System32	SUCCESS	Filter: FILE_NOTIFY...
18:56:14	Explorer.EXE	6268	ReadFile	C:\Windows\System32\AppResolver.dll	SUCCESS	Offset 493 568. Len...
18:56:14	Explorer.EXE	6268	ReadFile	C:\Windows\explorer.exe	SUCCESS	Offset 3 483 136. Len...
18:56:14	Explorer.EXE	6268	ReadFile	C:\Windows\explorer.exe	SUCCESS	Offset 3 470 848. Len...
18:56:14	Explorer.EXE	6268	ReadFile	C:\Windows\explorer.exe	SUCCESS	Offset 3 263 488. Len...
18:56:14	Explorer.EXE	6268	ReadFile	C:\Windows\explorer.exe	SUCCESS	Offset 3 304 448. Len...
18:56:14	Explorer.EXE	6268	ReadFile	C:\Windows\explorer.exe	SUCCESS	Offset 3 247 104. Len...
18:56:14	Explorer.EXE	6268	ReadFile	C:\Windows\explorer.exe	SUCCESS	Offset 3 292 160. Len...
18:56:14	Explorer.EXE	6268	RegQueryValue	HKCU\Software\Classes	SUCCESS	Query: Name
18:56:14	Explorer.EXE	6268	RegQueryValue	HKCU\Software\Classes	SUCCESS	Query: HandleTag...
18:56:14	Explorer.EXE	6268	RegOpenKey	HKCU\Software\Classes	SUCCESS	Query: HandleTag...
18:56:14	Explorer.EXE	6268	RegOpenKey	HKCU\Software\Classes\CLSID\{56AD4...	NAME NOT FOUND	Desired Access: R...
18:56:14	Explorer.EXE	6268	RegOpenKey	HKCR\CLSID\{56AD4C5D-B908-4F85-8F...	NAME NOT FOUND	Desired Access: R...
18:56:14	Explorer.EXE	6268	RegOpenKey	HKCU	SUCCESS	Desired Access: Q...
18:56:14	Explorer.EXE	6268	RegCloseKey	HKCU	SUCCESS	
18:56:14	Explorer.EXE	6268	RegQueryValue	HKCU	SUCCESS	Query: HandleTag...
18:56:14	Explorer.EXE	6268	RegOpenKey	HKCU\SOFTWARE\Microsoft\TabletTip...	NAME NOT FOUND	Desired Access: Q...
18:56:14	Explorer.EXE	6268	RegQueryValue	HKCU\Software\Classes	SUCCESS	Query: Name
18:56:14	Explorer.EXE	6268	RegQueryValue	HKCU\Software\Classes	SUCCESS	Query: HandleTag...
18:56:14	Explorer.EXE	6268	RegQueryValue	HKCU\Software\Classes	SUCCESS	Query: HandleTag...
18:56:14	Explorer.EXE	6268	RegOpenKey	HKCU\Software\Classes\CLSID\{56AD4...	NAME NOT FOUND	Desired Access: R...
18:56:14	Explorer.EXE	6268	RegOpenKey	HKCR\CLSID\{56AD4C5D-B908-4F85-8F...	NAME NOT FOUND	Desired Access: R...
18:56:14	Explorer.EXE	6268	ReadFile	C:\Windows\System32\UIAnimation.dl...	SUCCESS	Offset 212 480. Len...
18:56:14	svchost.exe	2536	ReadFile	C:\Windows\System32\winsqlite3.dll	SUCCESS	Offset 864 256. Len...
18:56:14	Explorer.EXE	6268	ReadFile	C:\Windows\System32\UIAnimation.dl...	SUCCESS	Offset 197 632. Len...
18:56:14	Explorer.EXE	6268	ReadFile	C:\Windows\System32\TaskFlowDataE...	SUCCESS	Offset 1 417 728. Le...

Showing 185 443 of 582 877 events (31%) Backed by virtual memory

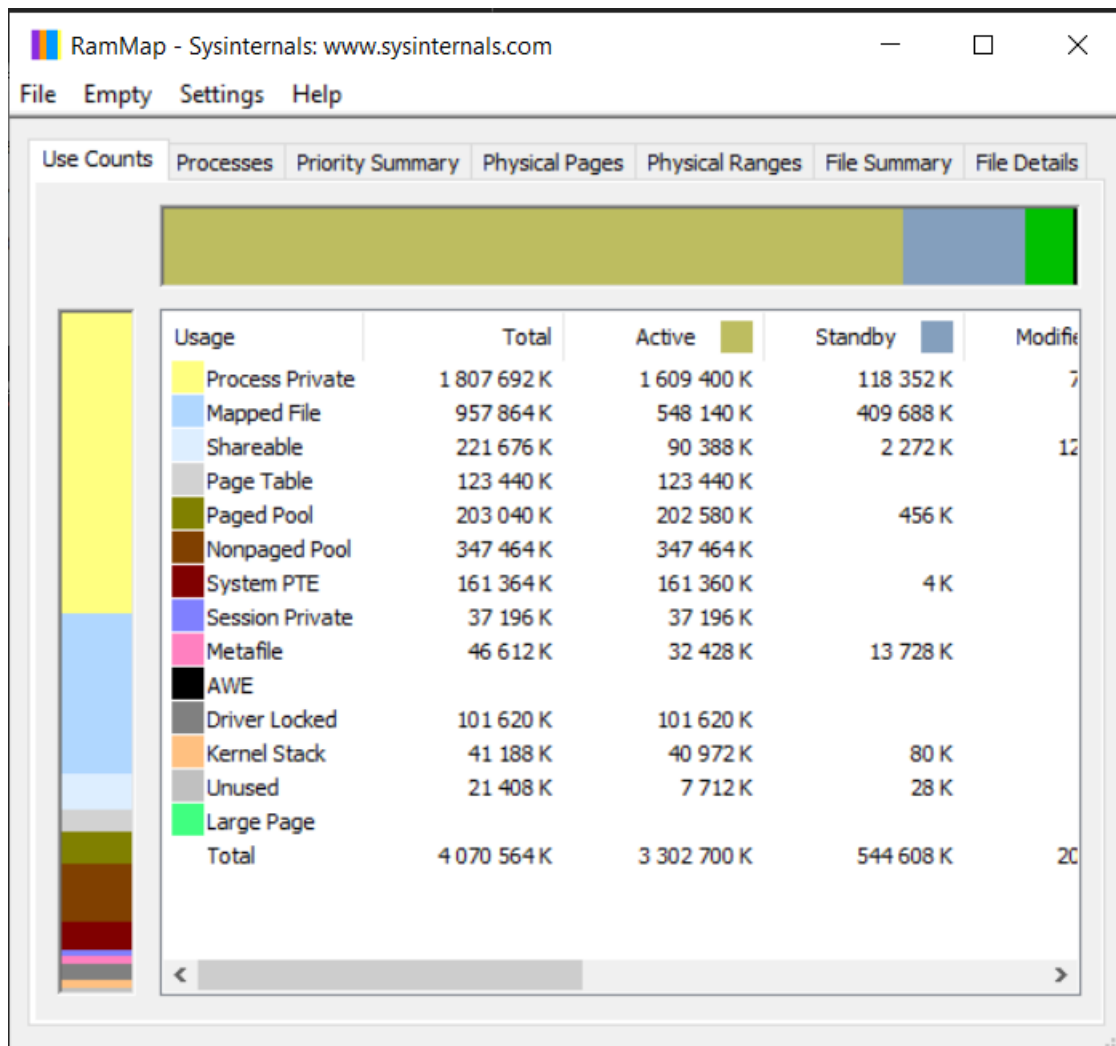
Autologon - Sysinternals

Username:

Domain:

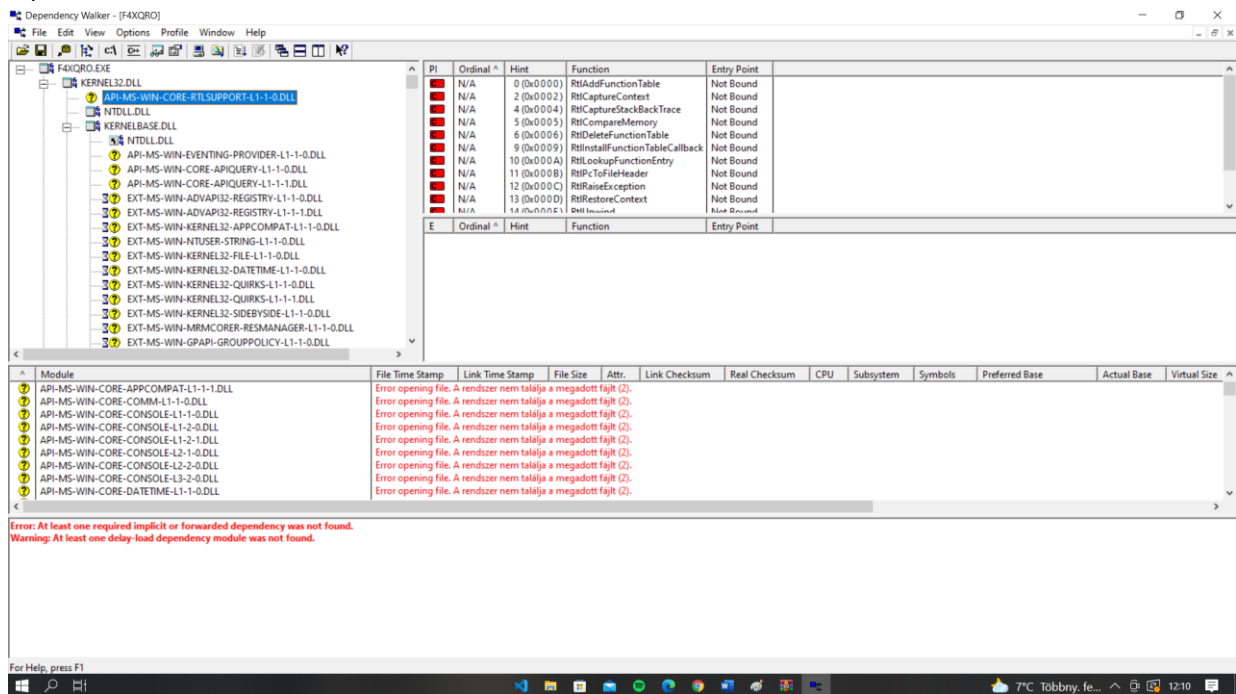
Password:

e.) A RAMMap egy speciális fizikai memóriahasználat-elemzési segédprogram.



3.feladat

a.)



b.)

A Windows NT alapú operációs rendszerekben az NTDLL.DLL használata megkerülhetetlen a user mód és a kernel mód közötti kommunikáció lebonyolításához. A felhasználói objektumok csak az NTDLL.DLL igénybe vételével érhetik el az operációs rendszer kernel módban működő részét, illetve a hardvert. NTDLL.DLL tartalmilag az executive által kijárlott függvényeknek megfelelő függvény csonkokból áll, melyek ugyanolyan a paraméterezésűek, mint az executive-ban lévő párjuk. Ezen kívül tartalmaz számos további függvény az alrendszerek támogatására. Ezek közül a két legfontosabb:

dinamikus memória kezelés (Heap)

Image Loader

Dependency Walker - [F4XQRO]

File Edit View Options Profile Window Help

F4XQRO.EXE

KERNEL32.DLL

API-MS-WIN-CORE-RTLSUPPORT-L1-1-0.DLL

NTDLL.DLL

KERNELBASE.DLL

NTDLL.DLL

API-MS-WIN-EVENTING-PROVIDER-L1-1-0.DLL

API-MS-WIN-CORE-APIQUERY-L1-1-0.DLL

API-MS-WIN-CORE-APIQUERY-L1-1-1.DLL

EXT-MS-WIN-ADVAPI32-REGISTRY-L1-1-0.DLL

EXT-MS-WIN-ADVAPI32-REGISTRY-L1-1-1.DLL

EXT-MS-WIN-KERNEL32-APPCOMPAT-L1-1-0.DLL

EXT-MS-WIN-KERNEL32-FILE-L1-1-0.DLL

EXT-MS-WIN-KERNEL32-DATETIME-L1-1-0.DLL

EXT-MS-WIN-KERNEL32-QUIRKS-L1-1-0.DLL

EXT-MS-WIN-KERNEL32-SIDEWAYSIDE-L1-1-0.DLL

EXT-MS-WIN-MRMCMORER-RESMANAGER-L1-1-0.DLL

EXT-MS-WIN-GAPI-GROUPPOLICY-L1-1-0.DLL

PI	Ordinal ^	Hint	Function	Entry Point
	N/A	340 (0x0154)	NtEnumerateKey	Not Bound
	N/A	343 (0x0157)	NtEnumerateValueKey	Not Bound
	N/A	348 (0x015C)	NtFindAtom	Not Bound
	N/A	353 (0x0161)	NtFlushKey	Not Bound
	N/A	358 (0x0166)	NtFreeVirtualMemory	Not Bound
	N/A	361 (0x0169)	NtFsControlFile	Not Bound
	N/A	367 (0x016F)	NtGetDevicePowerState	Not Bound
	N/A	381 (0x017D)	NtInitiatePowerAction	Not Bound
	N/A	383 (0x017F)	NtIsSystemResumeAutomatic	Not Bound
	N/A	392 (0x0188)	NtLockFile	Not Bound
	N/A	403 (0x0193)	NtOpenThreadDebuggingSession	Not Bound

E	Ordinal ^	Hint	Function	Entry Point
	8 (0x0008)	N/A	N/A	0x0007F110
	9 (0x0009)	0 (0x0000)	A_SHAFinal	0x00040230
	10 (0x000A)	1 (0x0001)	A_SHAInit	0x00041060
	11 (0x000B)	2 (0x0002)	A_SHAUpdate	0x000410A0
	12 (0x000C)	3 (0x0003)	AlpcAdjustCompletionListConcurrencyCount	0x000E0740
	13 (0x000D)	4 (0x0004)	AlpcFreeCompletionListMessage	0x00070620
	14 (0x000E)	5 (0x0005)	AlpcGetCompletionListLastMessageInformation	0x000E0770
	15 (0x000F)	6 (0x0006)	AlpcGetCompletionListMessageAttributes	0x000E0790
	16 (0x0010)	7 (0x0007)	AlpcGetHeaderSize	0x00070350
	17 (0x0011)	8 (0x0008)	AlpcGetMessageAttribute	0x00070310

Module	File Time Stamp	Link Time Stamp	File Size	Attr	Link Checksum	Real Checksum	CPU	Subsystem	Symbols	Preferred Base	Actual Base	Virtual Size
API-MS-WIN-CORE-APIQUERY-L1-1-0.DLL	Error opening file. A rendszert nem találja a megadott fájl (2).											
API-MS-WIN-CORE-APIQUERY-L1-1-1.DLL	Error opening file. A rendszert nem találja a megadott fájl (2).											
API-MS-WIN-CORE-APPCOMPAT-L1-1-0.DLL	Error opening file. A rendszert nem találja a megadott fájl (2).											
API-MS-WIN-CORE-APPCOMPAT-L1-1-1.DLL	Error opening file. A rendszert nem találja a megadott fájl (2).											
API-MS-WIN-CORE-COMM-L1-1-0.DLL	Error opening file. A rendszert nem találja a megadott fájl (2).											
API-MS-WIN-CORE-CONSOLE-L1-1-0.DLL	Error opening file. A rendszert nem találja a megadott fájl (2).											
API-MS-WIN-CORE-CONSOLE-L1-2-0.DLL	Error opening file. A rendszert nem találja a megadott fájl (2).											
API-MS-WIN-CORE-CONSOLE-L1-2-1.DLL	Error opening file. A rendszert nem találja a megadott fájl (2).											
API-MS-WIN-CORE-CONSOLE-L2-1-0.DLL	Error opening file. A rendszert nem találja a megadott fájl (2).											

Error: At least one required implicit or forwarded dependency was not found.
Warning: At least one delay-load dependency module was not found.

For Help, press F1