

Operációs rendszerek BSc

2. Gyak.

2022. 02. 15.

Készítette:

Zavarkó Máté

Gazdasági Informatikus

IN3BLK

Miskolc, 2022

1. feladat

a) Mappa szerkezet

```
Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215 (Feladat)
$ mkdir IN3BLK

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215 (Feladat)
$ cd IN3BLK

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK (Feladat)
$ mkdir bokor

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK (Feladat)
$ cd bokor

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK/bokor (Feladat)
$ mkdir banan

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK/bokor (Feladat)
$ mkdir mogyoro

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK/bokor (Feladat)
$ mkdir barack

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK/bokor (Feladat)
$ cd ..

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK (Feladat)
$ mkdir fa

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK (Feladat)
$ cd fa

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK/fa (Feladat)
$ mkdir korte

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK/fa (Feladat)
$ cd ..

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK (Feladat)
$ mkdir land

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK (Feladat)
$ cd land

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK/land (Feladat)
$ mkdir szeder

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK/land (Feladat)
$ mkdir kokusz
```

b) Másolat készítés

```
Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK/land (Feladat)
$ cp -r ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK/land/szeder ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK/fa

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK/land (Feladat)
$ cp -r ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK/bokor/banan ~/IN3BLKOsGyak/IN3BLK_0215/IN3BLK/fa
```

c) Áthelyezések

```
Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLK0sGyak/IN3BLK_0215/IN3BLK/land (Feladat)
$ mv ~/IN3BLK0sGyak/IN3BLK_0215/IN3BLK/bokor/barack ~/IN3BLK0sGyak/IN3BLK_0215/IN3BLK/fa

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLK0sGyak/IN3BLK_0215/IN3BLK/land (Feladat)
$ mv ~/IN3BLK0sGyak/IN3BLK_0215/IN3BLK/land/kokusz ~/IN3BLK0sGyak/IN3BLK_0215/IN3BLK/fa
```

d) Katalógus törlése és szöveges állományok létrehozása

```
Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLK0sGyak/IN3BLK_0215/IN3BLK/land (Feladat)
$ rmdir ~/IN3BLK0sGyak/IN3BLK_0215/IN3BLK/land/szeder

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLK0sGyak/IN3BLK_0215/IN3BLK/land (Feladat)
$ rmdir ~/IN3BLK0sGyak/IN3BLK_0215/IN3BLK/land
```

```
Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLK0sGyak/IN3BLK_0215/IN3BLK/bokor/banan (Feladat)
$ cat > leiras.txt
```

```
Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLK0sGyak/IN3BLK_0215/IN3BLK/fa (Feladat)
$ cat > felsorolas.txt
```

e) Szöveges állományokba írás

```
Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLK0sGyak/IN3BLK_0215/IN3BLK/bokor/banan (Feladat)
$ echo -e "A barack egy gyümölcs \nA barack nyáron terem \nA barack fán terem" > leiras.txt

Thuun@DESKTOP-63RTLVP MINGW64 ~/IN3BLK0sGyak/IN3BLK_0215/IN3BLK/fa (Feladat)
$ echo -e "Dávid \nMárk \nMilán \nKinga \nGitta" > felsorolas.txt
```

f) Mappa listázása

```
C:\Users\Thuun>TREE C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215
Folder PATH listing
Volume serial number is 00000055 AC37:9685
C:\USERS\THUUN\IN3BLK0SGYAK\IN3BLK_0215
├── IN3BLK
│   ├── bokor
│   │   ├── banan
│   │   └── mogyoro
│   └── fa
│       ├── banan
│       ├── barack
│       ├── kokusz
│       ├── korte
│       └── szeder
```

g) Olyan file-ok, amelyek nevének második betűje e

```
C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215>dir /s "?e*"
Volume in drive C has no label.
Volume Serial Number is AC37-9685

Directory of C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK\bokor\banan

2022. 02. 22.  18:47                69 leiras.txt
                1 File(s)                69 bytes

Directory of C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK\fa

2022. 02. 22.  18:50                36 felsorolas.txt
                1 File(s)                36 bytes

Total Files Listed:
                2 File(s)                105 bytes
                0 Dir(s)  149 419 343 872 bytes free
```

h) Olvashatóság

```
C:\Windows\System32>icacls C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK\fa\felsorolas.txt /grant :r
processed file: C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK\fa\felsorolas.txt
Successfully processed 1 files; Failed processing 0 files
```

i) Mappa helyfoglalása

```
C:\Windows\System32>dir /s C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\
Volume in drive C has no label.
Volume Serial Number is AC37-9685

Directory of C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215

2022. 02. 22.  18:18    <DIR>          .
2022. 02. 22.  18:18    <DIR>          ..
2022. 02. 22.  18:33    <DIR>          IN3BLK
                0 File(s)                0 bytes

Directory of C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK

2022. 02. 22.  18:33    <DIR>          .
2022. 02. 22.  18:33    <DIR>          ..
2022. 02. 22.  18:30    <DIR>          bokor
2022. 02. 22.  18:38    <DIR>          fa
                0 File(s)                0 bytes

Directory of C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK\bokor

2022. 02. 22.  18:30    <DIR>          .
2022. 02. 22.  18:30    <DIR>          ..
2022. 02. 22.  18:37    <DIR>          banan
2022. 02. 22.  18:19    <DIR>          mogyoro
                0 File(s)                0 bytes
```

```

Directory of C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK\bokor\banan
2022. 02. 22. 18:37 <DIR>      .
2022. 02. 22. 18:37 <DIR>      ..
2022. 02. 22. 18:47          69 leiras.txt
                        1 File(s)          69 bytes

Directory of C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK\bokor\mogoro
2022. 02. 22. 18:19 <DIR>      .
2022. 02. 22. 18:19 <DIR>      ..
                        0 File(s)          0 bytes

Directory of C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK\fa
2022. 02. 22. 18:38 <DIR>      .
2022. 02. 22. 18:38 <DIR>      ..
2022. 02. 22. 18:28 <DIR>      banan
2022. 02. 22. 18:20 <DIR>      barack
2022. 02. 22. 18:50          36 felsorolas.txt
2022. 02. 22. 18:21 <DIR>      kokusz
2022. 02. 22. 18:20 <DIR>      korte
2022. 02. 22. 18:27 <DIR>      szeder
                        1 File(s)          36 bytes

Directory of C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK\fa\banan
2022. 02. 22. 18:28 <DIR>      .
2022. 02. 22. 18:28 <DIR>      ..
                        0 File(s)          0 bytes

Directory of C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK\fa\barack
2022. 02. 22. 18:20 <DIR>      .
2022. 02. 22. 18:20 <DIR>      ..
                        0 File(s)          0 bytes

Directory of C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK\fa\kokusz
2022. 02. 22. 18:21 <DIR>      .
2022. 02. 22. 18:21 <DIR>      ..
                        0 File(s)          0 bytes

Directory of C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK\fa\korte
2022. 02. 22. 18:20 <DIR>      .
2022. 02. 22. 18:20 <DIR>      ..
                        0 File(s)          0 bytes

Directory of C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK\fa\szeder
2022. 02. 22. 18:27 <DIR>      .
2022. 02. 22. 18:27 <DIR>      ..
                        0 File(s)          0 bytes

Total Files Listed:
      2 File(s)          105 bytes
     32 Dir(s)  149 418 450 944 bytes free

```

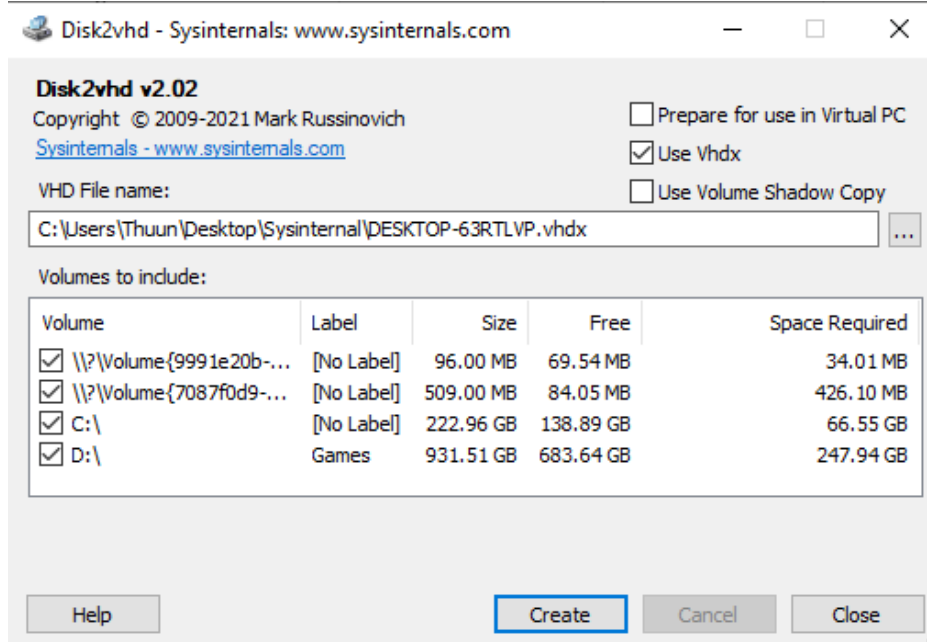
j) ABC-szerinti rendezés

```
C:\Windows\System32>sort C:\Users\Thuun\IN3BLK0sGyak\IN3BLK_0215\IN3BLK\fa\felsorolas.txt
David
Gitta
Kinga
Mark
Milan
```

2. feladat

a) File and Disk Utilities (Disk2vhd)

A Disk2vhd egy olyan segédprogram, amely létrehozza a fizikai lemezek VHD-verzióit (Virtuális merevlemez – A Microsoft virtuálisgép-lemezformátuma) a Microsoft Virtual PC-n vagy Microsoft Hyper-V virtuális gépeken való használatra.



Process Explorer - Sysinternals - www.sysinternals.com [DESKTOP-63RTLVP\Thuu]

File Options View Process Find Users Help

<Filter by name>

Process	CPU	Private Bytes	Working Set	PID	Description	Company Name
Registry		6 728 K	23 908 K	148		
System Idle Process	95.12	60 K	8 K	0		
System	0.13	216 K	11 400 K	4		
Interrupts	0.38	0 K	0 K	n/a	Hardware Interrupts and DPCs	
smss.exe		1 076 K	420 K	548		
Memory Compression	< 0.01	72 K	340 K	2516		
csrss.exe	< 0.01	1 864 K	2 248 K	708		
wininit.exe		1 452 K	1 208 K	796		
services.exe	< 0.01	5 840 K	8 076 K	872		
svchost.exe	< 0.01	10 964 K	19 212 K	1020	Windows-szolgáltatások gaz...	Microsoft Corporation
SettingSyncHost.exe		5 208 K	3 296 K	6944	Host Process for Setting Syn...	Microsoft Corporation
Start Menu Experience...	< 0.01	60 176 K	75 424 K	5620		
RuntimeBroker.exe		5 968 K	15 252 K	6752	Runtime Broker	Microsoft Corporation
SearchApp.exe	Susp...	141 744 K	165 496 K	7264	Search application	Microsoft Corporation
RuntimeBroker.exe		11 120 K	31 648 K	7652	Runtime Broker	Microsoft Corporation
YourPhone.exe	Susp...	52 668 K	21 732 K	8940		Microsoft Corporation
extensionCardHal_x86...		1 360 K	1 100 K	9100		
RuntimeBroker.exe		3 528 K	14 896 K	9164	Runtime Broker	Microsoft Corporation
AacKingstonDramHal...		1 252 K	1 004 K	9096		
Aac3572MbHal_x86...		1 804 K	1 512 K	5940		
RuntimeBroker.exe		2 336 K	5 744 K	5928	Runtime Broker	Microsoft Corporation
TextInputHost.exe	< 0.01	32 952 K	19 228 K	10136		Microsoft Corporation
SystemSettings.exe	Susp...	44 032 K	2 048 K	9132	Gépház	Microsoft Corporation
ApplicationFrameHost...		20 048 K	27 620 K	5716	Application Frame Host	Microsoft Corporation
UserOOBEBroker.exe		2 148 K	1 720 K	11228	User OOBEBroker	Microsoft Corporation
Video.UI.exe	Susp...	40 052 K	1 120 K	1752		
RuntimeBroker.exe		1 580 K	1 780 K	6956	Runtime Broker	Microsoft Corporation
SearchApp.exe	Susp...	373 444 K	376 476 K	2724	Search application	Microsoft Corporation
dihost.exe		3 824 K	7 952 K	7364	COM Surrogate	Microsoft Corporation
GameBar.exe	Susp...	37 284 K	11 536 K	5812	Xbox Game Bar	Microsoft Corporation
GameBarFT Server.exe		2 988 K	5 376 K	10680	Xbox Game Bar Full Trust C...	Microsoft Corporation

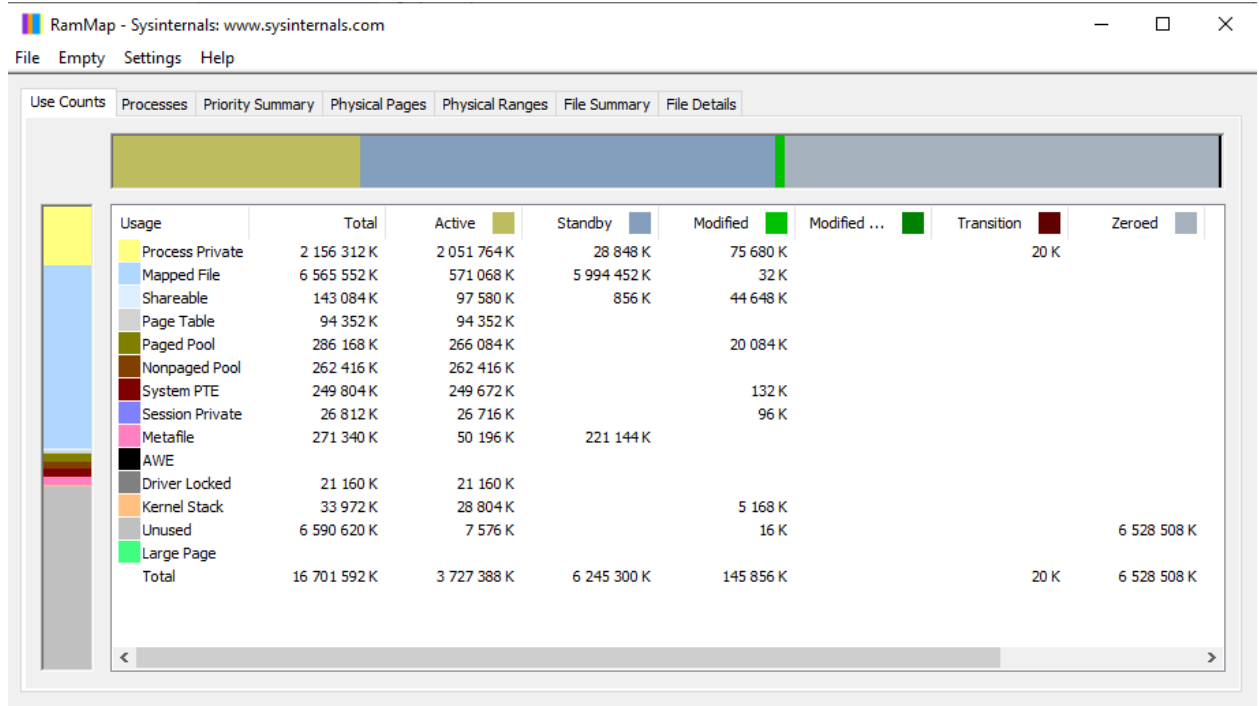
CPU Usage: 4.87% Commit Charge: 33.28% Processes: 167 Physical Usage: 22.71%

d) Security Utilities (LogonSession)

Felsorolja a jelenleg aktív bejelentkezési munkameneteket

e) Information Utilities (RAMMap)

A RAMMap egy speciális fizikai memóriahasználat-elemzési segédprogram. Különböző módokon mutatja be a használati adatokat a különböző lapjain.



3. feladat

a)