

Operációs rendszerek BSc

1. Gyak.
2022. 02. 08.

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

```

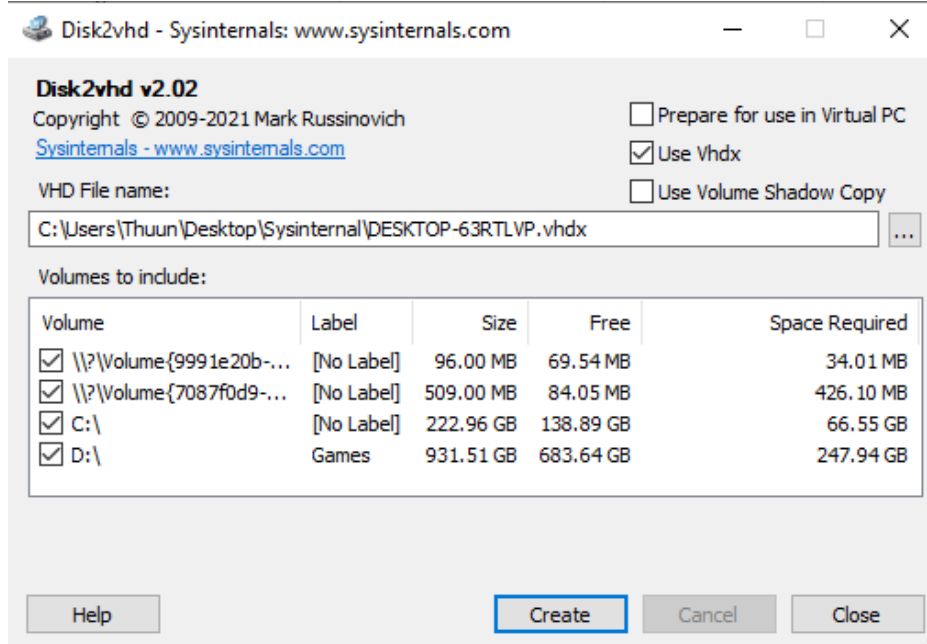
j) ABC-szerinti rendezés

```
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.



The screenshot displays the Windows Task Manager interface, specifically the 'Processes' tab. The window title is 'Process Explorer - Sysinternals: www.sysinternals.com [DESKTOP-63RTLVP\Thuuu]'. The menu bar includes File, Options, View, Process, Find, Users, and Help. The toolbar contains icons for various actions like opening Task Manager, showing command prompt, and refreshing. A search bar on the right says '<Filter by name>'. The main area is a table of running processes, sorted by CPU usage. The table has columns for Process, CPU, Private Bytes, Working Set, PID, Description, and Company Name. The processes listed include Registry, System Idle Process, System, Interrupts, smss.exe, Memory Compression, csrss.exe, wininit.exe, services.exe, svchost.exe, and several instances of SettingSyncHost.exe, StartMenuExperience.exe, RuntimeBroker.exe, SearchApp.exe, YourPhone.exe, extensionCardHal_x86.exe, AacKingstonDramHal.exe, Aac3572MbHal_x86.exe, TextInputHost.exe, SystemSettings.exe, ApplicationFrameHost.exe, UserOOBEBroker.exe, Video.UI.exe, GameBar.exe, and GameBarFT Server.exe. The status bar at the bottom shows CPU Usage: 4.87%, Commit Charge: 33.28%, Processes: 167, and Physical Usage: 22.71%.

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
StartMenuExperience.exe	< 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.exe		1 360 K	1 100 K	9100		
RuntimeBroker.exe		3 528 K	14 896 K	9164	Runtime Broker	Microsoft Corporation
AacKingstonDramHal.exe		1 252 K	1 004 K	9096		
Aac3572MbHal_x86.exe		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.exe		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
dllhost.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.

