

Powershell

1.

Powershell verzió lekérdezése:

```
PS C:\> $PSVersionTable

Name                           Value
----                           -
PSVersion                      5.1.19041.610
PSEdition                      Desktop
PSCompatibleVersions           {1.0, 2.0, 3.0, 4.0...}
BuildVersion                   10.0.19041.610
CLRVersion                     4.0.30319.42000
WSManStackVersion              3.0
PSRemotingProtocolVersion      2.3
SerializationVersion           1.1.0.1
```

2.

Tagok lekérdezése:

```
PS C:\> Get-Service | Get-Member

TypeName: System.ServiceProcess.ServiceController

Name                MemberType Definition
-----
Name                AliasProperty Name = ServiceName
RequiredServices    AliasProperty RequiredServices = ServicesDependedOn
Disposed            Event        System.EventHandler Disposed(System.Object, System.EventArgs)
Close               Method        void Close()
Continue            Method        void Continue()
CreateObjRef         Method        System.Runtime.Remoting.ObjRef CreateObjRef(type requestedType)
Dispose             Method        void Dispose(), void IDisposable.Dispose()
Equals              Method        bool Equals(System.Object obj)
ExecuteCommand       Method        void ExecuteCommand(int command)
GetHashCode          Method        int GetHashCode()
GetLifetimeService   Method        System.Object GetLifetimeService()
GetType             Method        type GetType()
InitializeLifetimeService Method        System.Object InitializeLifetimeService()
Pause               Method        void Pause()
Refresh             Method        void Refresh()
Start               Method        void Start(), void Start(string[] args)
Stop                Method        void Stop()
WaitForStatus        Method        void WaitForStatus(System.ServiceProcess.ServiceControllerStatus desiredStat...
CanPauseAndContinue Property      bool CanPauseAndContinue {get;}
CanShutdown          Property      bool CanShutdown {get;}
CanStop              Property      bool CanStop {get;}
Container            Property      System.ComponentModel.IContainer Container {get;}
DependentServices    Property      System.ServiceProcess.ServiceController[] DependentServices {get;}
DisplayName           Property      string DisplayName {get;set;}
MachineName          Property      string MachineName {get;set;}
ServiceHandle         Property      System.Runtime.InteropServices.SafeHandle ServiceHandle {get;}
ServiceName          Property      string ServiceName {get;set;}
ServicesDependedOn    Property      System.ServiceProcess.ServiceController[] ServicesDependedOn {get;}
ServiceType          Property      System.ServiceProcess.ServiceType ServiceType {get;}
Site                 Property      System.ComponentModel.ISite Site {get;set;}
StartType            Property      System.ServiceProcess.ServiceStartMode StartType {get;}
Status               Property      System.ServiceProcess.ServiceControllerStatus Status {get;}
ToString             ScriptMethod  System.Object ToString();
```

3.

Szolgáltatások lekérdezése:

```
PS C:\> Get-Service

Status      Name                DisplayName
-----
Running     AarSvc_8fbc2        AarSvc_8fbc2
Stopped     AJRouter            AllJoyn Router Service
Stopped     ALG                 Application Layer Gateway Service
Stopped     AppIDSvc            Application Identity
Running     AppInfo             Application Information
Stopped     AppMgmt             Application Management
Stopped     AppReadiness        App Readiness
Stopped     AppVClient          Microsoft App-V Client
Running     AppXSvc             AppX Deployment Service (AppXSVC)
Stopped     aspnet_state        ASP.NET State Service
Stopped     AssignedAccessM...  AssignedAccessManager Service
Running     AudioEndpointBu...  Windows Audio Endpoint Builder
```

4.

Könyvtárak és fájlok listázása:

```
PS C:\> Get-Childitem

Directory: C:\

Mode                LastWriteTime         Length Name
----
d-----         8/24/2020   10:49 PM              Intel
d-----        12/7/2019   10:14 AM              PerfLogs
d-r---         3/9/2021   11:19 AM          Program Files
d-r---         3/9/2021   11:55 AM    Program Files (x86)
d-----         9/1/2020   10:56 AM             Python27
d-----        1/31/2021    5:36 PM             Python39
d-----        10/8/2020   10:24 PM          TDM-GCC-64
d-----        10/29/2020    6:17 PM          totalcmd
d-r---        12/11/2020    3:15 PM            Users
d-----         3/8/2021    7:40 PM           Windows
-a----         2/20/2020    6:04 PM           277 aow_drv.log
```

5.

Parancsok rövidebb nevük (Alias-uk) lekérdezése:

```
PS C:\> Get-Alias

CommandType      Name
-----
Alias            % -> ForEach-Object
Alias            ? -> Where-Object
Alias            ac -> Add-Content
Alias            asnp -> Add-PSSnapin
Alias            cat -> Get-Content
Alias            cd -> Set-Location
Alias            CFS -> ConvertFrom-String
Alias            chdir -> Set-Location
Alias            clc -> Clear-Content
Alias            clear -> Clear-Host
Alias            clhy -> Clear-History
Alias            cli -> Clear-Item
Alias            clp -> Clear-ItemProperty
Alias            cls -> Clear-Host
```

6.

Processz nevű alias definiálása, futtatása és lekérdezése:

```
PS C:\> New-Alias "processz" Get-Process
PS C:\> processz
```

Handles	NPM(K)	PM(K)	WS(K)	CPU(s)	Id	SI	ProcessName
206	13	2420	9484	0.11	10268	1	AdobeIPCBroker
329	18	8432	31172	7.86	9208	1	ApplicationFrameHost
247	18	10968	18544	527.33	7812	0	audiodg
243	16	4236	22020	0.05	15056	1	backgroundTaskHost
38	4	596	2512	0.00	5660	1	CCXProcess
241	17	25068	9744	4.77	8456	1	ChromeDllInjector
413	49	37928	2988	2.23	12892	1	ColorPickerUI
124	10	7900	7528	0.05	1484	1	conhost
240	14	9580	22540	2.67	1952	1	conhost
101	7	6316	5212	0.02	4220	1	conhost
101	7	6316	5468	0.09	11872	1	conhost
101	7	6312	5328	0.02	16944	1	conhost

```
PS C:\> Get-Alias processz
```

CommandType	Name	Version	Source
Alias	processz -> Get-Process		

7.

Meghajtón lévő szolgáltatások listázása, formázott lista, tábla szerint:

```
PS C:\> Get-Service | fl name, status

Name      : AarSvc_8fbc2
Status    : Running

Name      : AJRouter
Status    : Stopped

Name      : ALG
Status    : Stopped

Name      : AppIDSvc
Status    : Stopped

Name      : Appinfo
Status    : Running

Name      : AppMgmt
```

```
PS C:\> Get-Service | ft name, status

Name                                     Status
----                                     -
AarSvc_8fbc2                             Running
AJRouter                                 Stopped
ALG                                       Stopped
AppIDSvc                                 Stopped
Appinfo                                  Running
AppMgmt                                 Stopped
AppReadiness                             Stopped
AppVClient                               Stopped
AppXSvc                                  Running
aspnet_state                             Stopped
AssignedAccessManagerSvc                 Stopped
AudioEndpointBuilder                     Running
Audiosrv                                 Running
autotimesvc                              Stopped
AxInstSV                                 Stopped
BcastDVRUserService_8fbc2                Stopped
```

```
PS C:\> Get-Service | ft name, status -AutoSize

Name                                     Status
----                                     -
AarSvc_8fbc2                             Running
AJRouter                                 Stopped
ALG                                       Stopped
AppIDSvc                                 Stopped
Appinfo                                  Running
AppMgmt                                 Stopped
AppReadiness                             Stopped
AppVClient                               Stopped
AppXSvc                                  Running
aspnet_state                             Stopped
AssignedAccessManagerSvc                 Stopped
AudioEndpointBuilder                     Running
Audiosrv                                 Running
autotimesvc                              Stopped
AxInstSV                                 Stopped
BcastDVRUserService_8fbc2                Stopped
BDESVC                                   Stopped
```

8.

Objektumok sorbarendezése(Növekvő/Csökkenő)

```
PS C:\> Get-Process | Sort-Object name
```

Handles	NPM(K)	PM(K)	WS(K)	CPU(s)	Id	SI	ProcessName
206	13	2420	9704	0.11	10268	1	AdobeIPCBroker
351	19	8376	31304	8.92	9208	1	ApplicationFrameHost
245	18	10940	18572	537.38	7812	0	audiodg
248	16	4376	22204	0.09	14276	1	backgroundTaskHost
616	46	23116	72416	0.38	8060	1	backgroundTaskHost
38	4	596	2612	0.00	5660	1	CCXProcess
241	17	25068	9784	4.86	8456	1	ChromeDllInjector
413	49	37928	7640	2.30	12892	1	ColorPickerUI
101	7	6316	5672	0.16	11872	1	conhost
101	7	6312	5696	0.02	16944	1	conhost
124	10	7932	7836	0.06	18292	1	conhost
124	10	7900	7856	0.05	1484	1	conhost
240	14	9584	22600	5.36	1952	1	conhost
101	7	6316	5484	0.03	4220	1	conhost
831	57	84268	72368	1.19	15808	1	Cortana
948	43	3064	5992		856	1	csrss
690	25	1776	5188		756	0	csrss
527	19	11972	28372	12.45	8552	1	ctfmon
434	19	5168	16852		3668	0	dasHost
200	16	3024	10520		12012	0	dllhost
238	23	5328	12308	0.11	11632	1	dllhost
159	10	3524	15340	0.55	6184	1	dllhost

```
PS C:\> Get-Process | Sort-Object name -Descending
```

Handles	NPM(K)	PM(K)	WS(K)	CPU(s)	Id	SI	ProcessName
770	49	74892	45700	0.92	10868	1	YourPhone
559	27	7816	24700		18140	0	wmpnetwk
333	14	12452	20108		6696	0	WmiPrvSE
271	12	2868	10376		1036	1	winlogon
165	11	1524	5888		848	0	wininit
374	23	28796	28156	714.70	15776	1	voicemeeterpro
212	13	4516	13512	38.80	16616	1	VoicemeeterClient
404	20	62300	56592	2.50	8992	1	VirtualBox
496	32	66868	39004	0.48	11692	1	Video.UI
1298	18	9036	22736	1.45	7776	1	VBoxSVC
185	10	2056	10372		12496	0	VBoxSDS
133	9	3544	9504	0.31	13464	1	unsecapp
609	26	62212	50380	2.88	12436	1	TextInputHost
178	14	2544	10668	183.67	16472	1	TestDDCCI
2165	17	38424	24872	69.92	16676	1	TestDDCCI
394	308	17032	17376		5360	0	TeamViewer_Service
320	39	9996	20156	1.72	8292	1	taskhostw
19494	0	200	144		4	0	System
172	9	1896	6904		2424	0	svchost
305	7	1304	5144		2416	0	svchost
461	16	11940	19400		2488	0	svchost
182	11	2048	7060		2564	0	svchost

9.

Windows idő Service lekérdezése:

```
PS C:\> Get-Service | Where-Object { $_.name -eq "w32time" }

Status      Name      DisplayName
-----
Stopped     W32Time   Windows Time
```

10.

A „wi” karakterekkel kezdődő nevek lekérdezése.(* egy univerzális karakter):

```
PS C:\> Get-Service | Where-Object { $_.name -like "wi*" }

Status      Name      DisplayName
-----
Stopped     WiaRpc     Still Image Acquisition Events
Running     WinDefend  Microsoft Defender Antivirus Service
Running     WinHttpAutoProx... WinHTTP Web Proxy Auto-Discovery Se...
Running     Winmgmt    Windows Management Instrumentation
Stopped     WinRM      Windows Remote Management (WS-Manag...
Stopped     wisvc      Windows Insider Service
```

Állapot szerinti csoportosítás:

```
PS C:\> Get-Service | Group-Object status

Count Name      Group
-----
130 Running {AarSvc_8fbc2, Appinfo, AppXSvc, AudioEndpointBuilder...}
161 Stopped {AJRouter, ALG, AppIDSvc, AppMgmt...}
```

Objektumok bejárása:

```
PS C:\> Get-Process | ForEach-Object { $_.id*2 }

20536
18416
15624
28552
11320
16912
25784
2968
```

11.

Objektumok megszámlálása:

```
PS C:\> Get-Process | Measure-Object

Count      : 258
Average    :
Sum        :
Maximum    :
Minimum    :
Property   :
```

12.

Objektumok megszámlálása max, min, avg, sum szerint!

```
PS C:\> Get-Process | Measure-Object -Property id -Maximum -Minimum -Average -Sum

Count      : 259
Average    : 8108.67953667954
Sum        : 2100148
Maximum    : 18356
Minimum    : 0
Property   : Id
```

13.

Objektumok megszámlálása:

```
PS C:\> $x = (Get-Service)
PS C:\> $x.count
291
PS C:\> (Get-Service).count
291
PS C:\>
```

14.

Tagok készítése és lekérdezése:

```
PS C:\> $x = 5
PS C:\> $x | Get-Member

TypeName: System.Int32

Name      MemberType Definition
-----
CompareTo Method      int CompareTo(System.Object value), int CompareTo(int value), int IComparable.CompareTo(Syste...
Equals     Method      bool Equals(System.Object obj), bool Equals(int obj), bool IEquatable[int].Equals(int other)
GetHashCode Method      int GetHashCode()
GetType    Method      type GetType()
GetTypeCode Method     System.TypeCode GetTypeCode(), System.TypeCode IConvertible.GetTypeCode()
ToBoolean  Method      bool IConvertible.ToBoolean(System.IFormatProvider provider)
ToByte     Method      byte IConvertible.ToByte(System.IFormatProvider provider)
ToChar     Method      char IConvertible.ToChar(System.IFormatProvider provider)
ToDateTime Method     datetime IConvertible.ToDateTime(System.IFormatProvider provider)
ToDecimal  Method      decimal IConvertible.ToDecimal(System.IFormatProvider provider)
ToDouble   Method      double IConvertible.ToDouble(System.IFormatProvider provider)
```

15.

A „szoveg” nevű változó behelyettesítése:

```
PS C:\> $szoveg = "Miskolc"
PS C:\> "$szoveg-on élek."
Miskolc-on élek.
PS C:\> '$szoveg-on élek.'
$szoveg-on élek.
PS C:\>
```

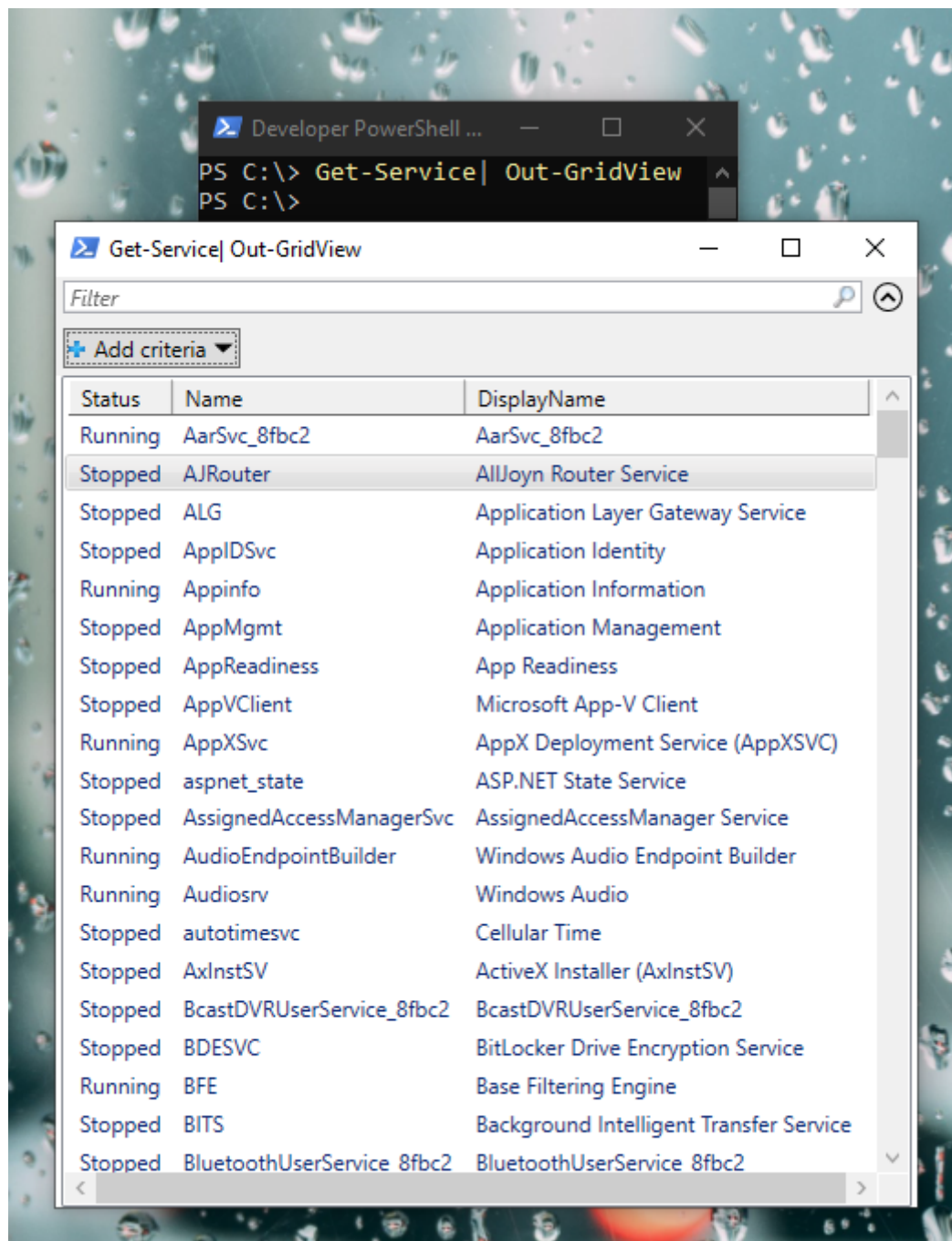
16.

A „szoveg” nevű változó hossza lekérdezése, karakterek konvertálása nagybetűssé, karakterek kicserélése, változó „kettévágása”:

```
PS C:\> $szoveg.Length
7
PS C:\> $szoveg.ToUpper()
MISKOLC
PS C:\> $szoveg.Replace("kolc", "ka")
Miska
PS C:\> $szoveg.Split("s")
Mi
kolc
```


17.

Kimenet átirányítása egy külön ablakba:



18.

KLYSO.txt beolvasása, kiírása, sorok megszámlálása, adatok kiírása:

```
PS C:\> $n= "C:\KLYS01.txt"
PS C:\> $neptunkod = Get-Content $n
PS C:\> $neptunkod
Czobor Patrik
PS C:\> $neptunkod.Count
1
PS C:\> Get-Item $n

    Directory: C:\

Mode                LastWriteTime         Length Name
----                -
-a----             3/13/2021  12:33 AM             13 KLYS01.txt
```