PowerShell

```
PS C:\Users\Toasty> $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
```

```
PS C:\Users\Toasty> 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();
```

```
PS C:\Users\Toasty> Get-Service

Status     Name                DisplayName
------     ----                -----------
Stopped    AarSvc_4e831        AarSvc_4e831
Running    AdobeARMservice     Adobe Acrobat Update Service
Stopped    AJRouter            AllJoyn-útválasztó szolgáltatás
Stopped    ALG                 Alkalmazási réteg átjárószolgáltatása
Stopped    AppIDSvc            Alkalmazásidentitás
Running    Appinfo             Alkalmazásinformációk
Running    Apple Mobile De...  Apple Mobile Device Service
Stopped    AppMgmt             Alkalmazásvezérlés
Stopped    AppReadiness        Alkalmazás-előkészítő
Stopped    AppVClient          Microsoft App-V Client
Running    AppXSvc             AppX Deployment Service (AppXSVC)
Stopped    AssignedAccessM...  AssignedAccessManager szolgáltatás
Running    AudioEndpointBu...  Windows-hangvégpontépítő
Running    Audiosrv            Windows audió
Stopped    autotimesvc         Mobilhálózati idő
Stopped    AxInstSV            ActiveX Telepítő (AxInstSV)
Stopped    BcastDVRUserSer...  BcastDVRUserService_4e831
Stopped    BDESVC              BitLocker meghajtótitkosítási szolg...
Running    BFE                 Alap szűrőprogram
Stopped    BITS                Háttérben futó intelligens átviteli...
Stopped    BluetoothUserSe...  BluetoothUserService_4e831
Running    BrokerInfrastru...  Háttérfeladatok infrastruktúra-szol...
Running    BTAGService         Bluetooth-hangátjáró szolgáltatás
Running    BthAvctpSvc         AVCTP-szolgáltatás
Running    bthserv             Bluetooth-támogatási szolgáltatás
Running    camsvc              Képesség hozzáférés-kezelési szolgá...
Stopped    CaptureService_...  CaptureService_4e831
Running    cbdhsvc_4e831       cbdhsvc_4e831
Running    CDPSvc              Csatlakoztatott eszközök platformja...
Running    CDPUserSvc_4e831    CDPUserSvc_4e831
Stopped    CertPropSvc         Tanúsítvány-terjesztés
Running    ClipSVC             Ügyfél-licencelési szolgáltatás (Cl...
Stopped    COMSysApp           COM+ System Application
Stopped    ConsentUxUserSv...  ConsentUxUserSvc_4e831
Running    CoreMessagingRe...  CoreMessaging
Stopped    CredentialEnrol...  CredentialEnrollmentManagerUserSvc_...
Running    CryptSvc            Kriptográfiai szolgáltatások
Stopped    CscService          Offline fájlok
Running    DcomLaunch          DCOM-kiszolgáló folyamatindítója
Stopped    defragsvc           Meghajtók optimalizálása
Stopped    DeviceAssociati...  DeviceAssociationBrokerSvc_4e831
Running    DeviceAssociati...  Eszköztársítási szolgáltatás
Stopped    DeviceInstall       Eszköztelepítő szolgáltatás
Stopped    DevicePickerUse...  DevicePickerUserSvc_4e831
Stopped    DevicesFlowUser...  DevicesFlowUserSvc_4e831
```

```
PS C:\Users\Toasty> Get-ChildItem


    Directory: C:\Users\Toasty


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
d-----        2021. 03. 03.     12:13            .config
d-----        2021. 03. 03.     12:59            .eclipse
d-----        2021. 03. 03.     13:53            .p2
d-----        2021. 02. 24.     11:08            .tooling
d-----        2021. 03. 07.     20:05            .VirtualBox
d-r---        2020. 07. 17.     15:34            3D Objects
d-----        2020. 07. 17.     15:56            ansel
d-r---        2020. 07. 17.     15:34            Contacts
d-r---        2021. 02. 24.     11:07            Desktop
d-r---        2021. 02. 08.     18:23            Documents
d-r---        2021. 03. 03.     14:29            Downloads
d-----        2021. 02. 24.     11:06            eclipse
d-r---        2020. 07. 17.     15:34            Favorites
d-----        2020. 07. 18.     12:50            Intel
d-r---        2020. 07. 17.     15:34            Links
d-r---        2020. 07. 17.     15:34            Music
d-r---        2020. 07. 17.     15:35            OneDrive
d-r---        2021. 01. 19.      9:33            Pictures
d-r---        2020. 12. 10.     21:42            Saved Games
d-r---        2020. 07. 17.     15:35            Searches
d-r---        2021. 03. 07.     18:49            Videos
d-----        2021. 03. 07.     19:23            VirtualBox VMs
-a----        2021. 03. 07.     20:02          0 $PSVersionTable
```

```
PS C:\Users\Toasty> Get-Alias

CommandType     Name                                               Version    Source
-----------     ----                                               -------    ------
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                          3.1.0.0    Microsoft.PowerShell.Utility
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
Alias           clv -> Clear-Variable
Alias           cnsn -> Connect-PSSession
Alias           compare -> Compare-Object
Alias           copy -> Copy-Item
Alias           cp -> Copy-Item
Alias           cpi -> Copy-Item
Alias           cpp -> Copy-ItemProperty
Alias           curl -> Invoke-WebRequest
Alias           cvpa -> Convert-Path
Alias           dbp -> Disable-PSBreakpoint
Alias           del -> Remove-Item
Alias           diff -> Compare-Object
Alias           dir -> Get-ChildItem
Alias           dnsn -> Disconnect-PSSession
Alias           ebp -> Enable-PSBreakpoint
Alias           echo -> Write-Output
Alias           epal -> Export-Alias
Alias           epcsv -> Export-Csv
Alias           epsn -> Export-PSSession
Alias           erase -> Remove-Item
Alias           etsn -> Enter-PSSession
Alias           exsn -> Exit-PSSession
Alias           fc -> Format-Custom
Alias           fhx -> Format-Hex                                  3.1.0.0    Microsoft.PowerShell.Utility
Alias           fl -> Format-List
Alias           foreach -> ForEach-Object
Alias           ft -> Format-Table
Alias           fw -> Format-Wide
Alias           gal -> Get-Alias
Alias           gbp -> Get-PSBreakpoint
```

```
  439     20    6696    27608   1,02   3992   1 svchost
  248     16    2748    11724          4000   0 svchost
  263     12    3148    14532          4280   0 svchost
  132      9    1568     6568          4344   0 svchost
  179     10    1912     7576          4356   0 svchost
  166      9    1728     7488          4388   0 svchost
  437     24    5048    19912   0,19   4428   1 svchost
  225     12    2672    10484          4716   0 svchost
  364     17    2648     9780          4804   0 svchost
  290     26    3872    13348          4940   0 svchost
  551     24   15460    32008          4968   0 svchost
  342     19   26928    32988          4996   0 svchost
  188     11    2272     9148          5040   0 svchost
  206     11    2256     8668          5108   0 svchost
  132      7    1244     5576          5128   0 svchost
  359     18    4168    16288          5140   0 svchost
  226     12    2576     9592          5204   0 svchost
  105      7    1232     5372          5380   0 svchost
  375     23    3332    11592          5416   0 svchost
  202     12    2248    11412          5672   0 svchost
  421     26    5276    18652          6628   0 svchost
  316     16    3872    23836   0,30   6736   1 svchost
  260     12    4156     9480          6992   0 svchost
  269     12    2476    11192          7024   0 svchost
  311     17    6544    18476          7756   0 svchost
  268     14    4144    15288          8896   0 svchost
  276     16    4008    18852          9884   0 svchost
  115      7    1324     6556         11644   0 svchost
  187     14    6064     9004         12228   0 svchost
 4939      0     196      152            4   0 System
  746     36   70308     3048   0,66  11924   1 SystemSettings
  304     33    6572    16120   0,45   4168   1 taskhostw
  622     26   62228    50148   1,27  11144   1 TextInputHost
  710     35   18200    44764  10,95   8852   1 TOTALCMD64
  124      9    1776     8316   0,05   5444   1 UserOOBEBroker
  450     91   17092    19092  73,98  11132   1 Volume2
  165     11    1356     6868          700   0 wininit
  273     12    2796    11104          892   1 winlogon
 1200     55  155552   140536  14,19  12140   1 WINWORD
  518     40   72668     3052   0,34   1440   1 YourPhone


PS C:\Users\Toasty> Get-Alias processz

CommandType     Name                                               Version    Source
-----------     ----                                               -------    ------
Alias           processz -> Get-Process
```

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

Name                                         Status
----                                         ------
AarSvc_4e831                                 Stopped
AdobeARMservice                              Running
AJRouter                                     Stopped
ALG                                          Stopped
AppIDSvc                                     Stopped
Appinfo                                      Running
Apple Mobile Device Service                  Running
AppMgmt                                      Stopped
AppReadiness                                 Stopped
AppVClient                                   Stopped
AppXSvc                                      Stopped
AssignedAccessManagerSvc                     Stopped
AudioEndpointBuilder                         Running
Audiosrv                                     Running
autotimesvc                                  Stopped
AxInstSV                                     Stopped
BcastDVRUserService_4e831                    Stopped
BDESVC                                       Stopped
BFE                                          Running
BITS                                         Stopped
BluetoothUserService_4e831                   Stopped
BrokerInfrastructure                         Running
BTAGService                                  Running
BthAvctpSvc                                  Running
bthserv                                      Running
camsvc                                       Running
CaptureService_4e831                         Stopped
cbdhsvc_4e831                                Running
CDPSvc                                       Running
CDPUserSvc_4e831                             Running
CertPropSvc                                  Stopped
ClipSVC                                      Stopped
COMSysApp                                    Stopped
ConsentUxUserSvc_4e831                       Stopped
CoreMessagingRegistrar                       Running
CredentialEnrollmentManagerUserSvc_4e831     Stopped
CryptSvc                                     Running
CscService                                   Stopped
DcomLaunch                                   Running
defragsvc                                    Stopped
DeviceAssociationBrokerSvc_4e831             Stopped
DeviceAssociationService                     Running
DeviceInstall                                Stopped
```

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

Handles  NPM(K)    PM(K)     WS(K)    CPU(s)     Id  SI ProcessName
-------  ------    -----     -----    ------     --  -- -----------
    576      66   144556    176616    53,23   5896   1 AcroRd32
    592      26    34700     52596     0,94   3328   1 AcroRd32
    223      17     3156     12116            4912   0 AppleMobileDeviceService
    316      19     9100     21184     0,09   4156   1 ApplicationFrameHost
    123       8     1548      6184            4896   0 armsvc
    292      19    27456     57176     0,72   8000   1 chrome
    204      13    11852     24092     0,09   4632   1 chrome
   1343      50    90088    158552    57,27   8476   1 chrome
    200      12     6908     16460     0,13  11864   1 chrome
    541      29   169196    103188    36,73  11656   1 chrome
    172       9     1752      6904     0,08   1724   1 chrome
    353      25    64248    102148    57,16    972   1 chrome
    226      17    37772     63640     5,08   1776   1 chrome
    297      18    13220     31356     2,81   2684   1 chrome
    251      18    24380     51492     4,31   2404   1 chrome
    100       8     6316      1344     0,13   9000   1 conhost
    270      13     4300     17188     4,50   7932   1 conhost
    489      17    10924     27444     7,48   4540   1 ctfmon
    694      29     2372      5576             708   1 csrss
    600      21     1792      5388             608   0 csrss
    379      17     3584     12044            2152   0 dasHost
    412      20    14656     36624     0,84  10704   1 Discord
    800     103   180124    188076   269,11  10980   1 Discord
    299      20    12372     56924     0,39  11448   1 Discord
    711      45    34296     64992    13,94  10396   1 Discord
    212      15    10940     23896     0,00  10532   1 Discord
    532      32    59104     79232     4,02  10656   1 Discord
    127       8     1476      6860     0,09   5184   1 dllhost
    226      17     3600     12816     0,13   1356   1 dllhost
   1133      52   140400     70644            1108   1 dwm
   2417     160   116000    145316    36,59   6520   1 explorer
     39       9     4756     12644              72   1 fontdrvhost
     32       5     1432      4064              68   0 fontdrvhost
    672      32    65192      3272     0,47   7308   1 GameBar
    287      12     2804     12820     0,09   5772   1 GameBarFTServer
    467      38    31808     54628            2340   0 IAStorDataMgrSvc
    380      30    25420     39936     1,14   2344   1 IAStorIcon
      0       0       60         8               0   0 Idle
    161      11     1304      7532            2800   0 jhi_service
    369      17     2920     14540     0,28  10472   1 jusched
    442      29     5460     17324            3480   0 LMS
   1471      26     7616     18796             792   0 lsass
      0       0      248     25704            2320   0 Memory Compression
   1054      53   102504      3100     1,13  12040   1 Microsoft.Photos
```

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

Handles  NPM(K)    PM(K)     WS(K)    CPU(s)     Id  SI ProcessName
-------  ------    -----     -----    ------     --  -- -----------
    518      40    72668      3052      0,34   1440   1 YourPhone
   1198      55   164372    144748     19,03  12140   1 WINWORD
    273      12     2796     11104             892   1 winlogon
    165      11     1356      6868             700   0 wininit
    450      91    17092     19092     79,83  11132   1 Volume2
    129       9     1824      8352      0,05   5444   1 UserOOBEBroker
    710      35    18200     44764     10,97   8852   1 TOTALCMD64
    622      26    62248     50168      1,39  11144   1 TextInputHost
    307      33     6572     16120      0,47   4168   1 taskhostw
    746      36    70308      3048      0,66  11924   1 SystemSettings
   4923       0      196       152               4   0 System
    227      12     2328      9828            2236   0 svchost
    391      15     4332     11208            2204   0 svchost
    291      10     2608      8604            2384   0 svchost
    168      12     1772      7400            2332   0 svchost
    239       7     1240      5776            2124   0 svchost
    304      15     3160     11388            2064   0 svchost
    122       8     1368      6308            2020   0 svchost
    166       9     1856      7100            2112   0 svchost
    218      12     2420     11588            2100   0 svchost
    156       9     1708      8328            2392   0 svchost
    230      17     2088      7392            2936   0 svchost
    312      14     3140      8696            2928   0 svchost
    410      31    11892     20116            3400   0 svchost
    272      16     2968      9436            2980   0 svchost
    140       9     1492      6660            2784   0 svchost
    391      17     6960     16740            2696   0 svchost
    391      11     2540      8492            2460   0 svchost
    202      11     2056      8796            2752   0 svchost
    181      10     1928      7212            2736   0 svchost
    194      22     1676      6996            1280   0 svchost
    111       7     1228      5264            1272   0 svchost
    216      12     2180      8932            1368   0 svchost
    396      17     5968     13964            1312   0 svchost
    275      14     2672     10896            1264   0 svchost
   1200      25    11100     26204             992   0 svchost
   1333      21     7652     16192             832   0 svchost
    224      28     1820      7828            1256   0 svchost
    312      11     2624      8464            1028   0 svchost
    148       9     1836     10024            1376   0 svchost
    200      10     1972      7292            1876   0 svchost
    195      11     1896      8152            1748   0 svchost
    224      10     2276      7396            2000   0 svchost
```

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

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

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

Status   Name               DisplayName
------   ----               -----------
Stopped  WiaRpc             Állókép-beviteli események
Running  WinDefend          Microsoft Defender víruskereső szol...
Running  WinHttpAutoProx... WinHTTP automatikus webproxy-kereső...
Running  Winmgmt            Windows Management Instrumentation
Stopped  WinRM              Rendszerfelügyeleti webszolgáltatások
Stopped  wisvc              Windows Insider szolgáltatás
```

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

Count Name                    Group
----- ----                    -----
  168 Stopped                 {AarSvc_4e831, AJRouter, ALG, AppIDSvc...}
  102 Running                 {AdobeARMservice, Appinfo, Apple Mobile Device Service, AudioEndpointBuilder...}


PS C:\Users\Toasty>
```

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


Name    : AarSvc_4e831
Status  : Stopped

Name    : AdobeARMservice
Status  : Running

Name    : AJRouter
Status  : Stopped

Name    : ALG
Status  : Stopped

Name    : AppIDSvc
Status  : Stopped

Name    : Appinfo
Status  : Running

Name    : Apple Mobile Device Service
Status  : Running

Name    : AppMgmt
Status  : Stopped

Name    : AppReadiness
Status  : Stopped

Name    : AppVClient
Status  : Stopped

Name    : AppXSvc
Status  : Stopped

Name    : AssignedAccessManagerSvc
Status  : Stopped

Name    : AudioEndpointBuilder
Status  : Running

Name    : Audiosrv
Status  : Running

Name    : autotimesvc
Status  : Stopped
```

```
PS C:\Users\Toasty> Get-Process | ForEach-Object { $_.id*2 }
6656
11792
9824
8312
9792
1944
3448
3552
4808
5368
9264
16000
16952
23312
23728
15864
18000
9080
1216
1416
4304
20792
21064
21312
21408
21960
22896
2712
10368
2216
13040
136
144
14616
11544
4680
4688
0
5600
20944
6960
1584
4640
24080
10296
10304
13624
6704
8448
```

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

Count    : 183
Average  :
Sum      :
Maximum  :
Minimum  :
Property :
```

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


Count    : 183
Average  :
Sum      :
Maximum  : 12228
Minimum  : 0
Property : Id
```

```
PS C:\Users\Toasty> (Get-Service).count
270
PS C:\Users\Toasty>
```

```
PS C:\Users\Toasty> $x = 5
PS C:\Users\Toasty> $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)
ToInt16     Method     int16 IConvertible.ToInt16(System.IFormatProvider provider)
ToInt32     Method     int IConvertible.ToInt32(System.IFormatProvider provider)
ToInt64     Method     long IConvertible.ToInt64(System.IFormatProvider provider)
ToSByte     Method     sbyte IConvertible.ToSByte(System.IFormatProvider provider)
ToSingle    Method     float IConvertible.ToSingle(System.IFormatProvider provider)
ToString    Method     string ToString(), string ToString(string format), string ToString(System.IFormatProvider pro...
ToType      Method     System.Object IConvertible.ToType(type conversionType, System.IFormatProvider provider)
ToUInt16    Method     uint16 IConvertible.ToUInt16(System.IFormatProvider provider)
ToUInt32    Method     uint32 IConvertible.ToUInt32(System.IFormatProvider provider)
ToUInt64    Method     uint64 IConvertible.ToUInt64(System.IFormatProvider provider)
```

```
PS C:\Users\Toasty> $tomb= 7,2,3 # explicit 3 elemű tömb
PS C:\Users\Toasty> $tomb += 324
PS C:\Users\Toasty> $tomb[0]
7
PS C:\Users\Toasty>
```

```
PS C:\Users\Toasty> $szoveg = "Miskolc"
PS C:\Users\Toasty> "$szoveg-on élek."
Miskolc-on élek.
PS C:\Users\Toasty> $szoveg.Length
7
PS C:\Users\Toasty> $szoveg.ToUpper()
MISKOLC
PS C:\Users\Toasty> $szoveg.Replace("kolc", "ka")
Miska
PS C:\Users\Toasty> $szoveg.Split("s")
Mi
kolc
PS C:\Users\Toasty>
```

```
PS C:\Users\Toasty> $neptunkod = Get-Content $n
PS C:\Users\Toasty> $neptunkod
BARTA AGOSTON
PS C:\Users\Toasty> $neptunkod.Count
1
PS C:\Users\Toasty> Get-Item $n


    Directory: C:\


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
-a----        2021. 03. 07.     20:20             13 neptunkod.txt


PS C:\Users\Toasty>
```