

Operációs rendszerek BSc

4. Gyak.

2022. 03. 02.

Készítette:

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Programtervező informatikus

Neptunkód F5HV4G

Miskolc, 2022

I.feladatok

II.feladatok

1.powershell verzió

```
Windows PowerShell
PS C:\Users\irobo\OSGyak\F5HV4G0sGyak\F5HV4G_0302> $PSVersionTable

Name                           Value
----                           -
PSVersion                      5.1.19041.1320
PSEdition                      Desktop
PSCompatibleVersions           {1.0, 2.0, 3.0, 4.0...}
BuildVersion                   10.0.19041.1320
CLRVersion                     4.0.30319.42000
WSManStackVersion              3.0
PSRemotingProtocolVersion      2.3
SerializationVersion           1.1.0.1

PS C:\Users\irobo\OSGyak\F5HV4G0sGyak\F5HV4G_0302> |
```

2. Kérdezze le a dátumot

```
PS C:\Users\irobo\OSGyak\F5HV4G0sGyak\F5HV4G_0302> get-date

2022. március 2., szerda 12:27:17

PS C:\Users\irobo\OSGyak\F5HV4G0sGyak\F5HV4G_0302> |
```

3. Kérdezze le a szolgáltatásokat

```
Windows PowerShell
PS C:\Users\irobo\OSGyak\F5HV4G0sGyak\F5HV4G_0302> 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;}
```

4. Kérdezze le a C:\ Meghajtóban lévő könyvtárakat ill. fájlokat

```
Windows PowerShell
PS C:\> Get-ChildItem

Directory: C:\

Mode                LastWriteTime         Length Name
----                -
d-----         2022. 02. 22.      17:50         egyetem
d-----         2019. 12. 07.      10:14         PerfLogs
d-r---         2022. 02. 26.      18:55         Program Files
d-r---         2022. 03. 01.      21:06         Program Files (x86)
d-----         2022. 02. 22.      17:48         stuff
d-r---         2022. 02. 22.      17:17         Users
d-----         2022. 03. 01.      23:31         Windows

PS C:\>
```

5. Kérdezze a parancsok rövidített neveit? (alias)

```
Windows PowerShell
PS C:\> 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
```

6. Készítsen egy „processz” nevű Alias, majd futtassa és kérdezze le

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

Handles	NPM(K)	PM(K)	WS(K)	CPU(s)	Id	SI	ProcessName
463	17	4540	78708	0,14	3436	1	AMDRSServ
289	14	2748	11900		2900	1	atieclxx
182	8	1428	5716		2524	0	atiesrxx
170	11	2528	9188	0,45	6444	1	AutoModeDetect
179	13	6772	16200	0,06	852	1	chrome
290	17	39300	84412	1,39	936	1	chrome
254	16	30060	56716	1,30	2428	1	chrome
880	42	266048	162608	31,05	3224	1	chrome
307	18	27876	72196	7,56	3520	1	chrome
243	16	16556	46372	0,91	3608	1	chrome
326	20	15084	36824	8,53	3856	1	chrome
238	15	15416	34096	0,19	5184	1	chrome
246	16	31300	60204	1,30	5536	1	chrome
2297	70	111304	167276	48,80	5876	1	chrome
238	15	15704	33992	0,14	6456	1	chrome
238	15	15368	33436	0,14	7900	1	chrome
238	15	16640	36576	0,22	7996	1	chrome
310	17	49852	94076	3,80	8024	1	chrome
240	15	15288	33700	0,11	8124	1	chrome
255	16	22916	43296	1,19	8268	1	chrome
238	15	15612	33624	0,11	8396	1	chrome
249	16	47716	59272	2,58	8484	1	chrome
284	18	29520	70316	2,41	9096	1	chrome
242	15	16200	36552	0,14	10236	1	chrome
222	13	7320	16652	0,19	10468	1	chrome

7. Listázza ki az adott meghajtón lévő szolgáltatásokat - formázott lista/tábla?

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

```
Name : AarSvc_702b9
Status : Stopped

Name : AJRouter
Status : Stopped

Name : ALG
Status : Stopped

Name : AMD External Events Utility
Status : Running

Name : AppIDSvc
Status : Stopped

Name : Appinfo
Status : Running

Name : AppMgmt
Status : Stopped

Name : AppReadiness
Status : Stopped

Name : AppVClient
Status : Stopped
```

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

Name                                     Status
----                                     -
AarSvc_702b9                           Stopped
AJRouter                               Stopped
ALG                                     Stopped
AMD External Events Utility             Running
AppIDSvc                               Stopped
Appinfo                                 Running
AppMgmt                                 Stopped
AppReadiness                           Stopped
AppVClient                             Stopped
AppXSvc                                 Running
AssignedAccessManagerSvc               Stopped
AudioEndpointBuilder                   Running
Audiosrv                               Running
autotimesvc                            Stopped
AxInstSV                               Stopped
BcastDVRUserService_702b9              Stopped
BDESVC                                 Stopped
BFE                                     Running
BITS                                   Running
BluetoothUserService_702b9             Running
BrokerInfrastructure                   Running
BTAGService                            Running
BthAvctpSvc                            Running
bthserv                                Running
camsvc                                 Running
CaptureService_702b9                   Running
```

8. Rendezze sorba név szerint (növekvő/csökkenő) az objektumokat!

```
Windows PowerShell
Stopped WerSvc                         Windows Error Reporting Service
Stopped WFDSCongMgrSvc                 Wi-Fi Direct Services Connection Ma...
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
Running WlanSvc                        WLAN AutoConfig
Running wlidsvc                       Microsoft Account Sign-in Assistant
Stopped wlpasvc                       Local Profile Assistant Service
Stopped WManSvc                        Windows Management Service
Stopped wmiApSrv                      WMI Performance Adapter
Stopped WMPNetworkSvc                 Windows Media Player Network Sharin...
Stopped workFoldersSvc                Work Folders
Stopped WpcMonSvc                     Parental Controls
Stopped WPDBusEnum                    Portable Device Enumerator Service
Running WpnService                     Windows Push Notifications System S...
Running WpnUserService_...            Windows Push Notifications User Ser...
Running wscsvc                        Security Center
Running WSearch                       Windows Search
Stopped wuauserv                      Windows Update
Stopped WwanSvc                       WWAN AutoConfig
Stopped XblAuthManager                Xbox Live Auth Manager
Stopped XblGameSave                  Xbox Live Game Save
Stopped XboxGipSvc                    Xbox Accessory Management Service
Stopped XboxNetApiSvc                 Xbox Live Networking Service

PS C:\>
```

9. Kérdezze le azokat a neveket melynek első két betűje wi!

```
Windows PowerShell
PS C:\> ls wi*

Directory: C:\

Mode                LastWriteTime         Length Name
----                -
d-----          2022. 03. 01.         23:31         Windows

PS C:\> |
```

10. Csoportosítsa állapot szerint az objektumokat!

```
Windows PowerShell
PS C:\> Get-Service | Sort-Object status

Status  Name                DisplayName
-----  -
Stopped ScDeviceEnum        Smart Card Device Enumeration Service
Stopped SCardSvr            Smart Card
Stopped RpcLocator    Remote Procedure Call (RPC) Locator
Stopped seclogon       Secondary Logon
Stopped SDRSVC          Windows Backup
Stopped SCPolicySvc    Smart Card Removal Policy
Stopped RetailDemo     Retail Demo Service
Stopped QWAVE           Quality Windows Audio Video Experience
Stopped PushToInstall  Windows PushToInstall Service
Stopped PrintWorkflowUs... PrintWorkflow_702b9
Stopped RemoteRegistry Remote Registry
Stopped RemoteAccess   Routing and Remote Access
Stopped RasAuto        Remote Access Auto Connection Manager
Stopped SNMPTRAP       SNMP Trap
Stopped SmsRouter      Microsoft Windows SMS Router Service.
Stopped smphost        Microsoft Storage Spaces SMP
Stopped ssh-agent      OpenSSH Authentication Agent
Stopped sppsvc         Software Protection
Stopped spectrum       Windows Perception Service
Stopped shpamsvc       Shared PC Account Manager
Stopped SensorService  Sensor Service
Stopped SensorDataService Sensor Data Service
Stopped Sense          Windows Defender Advanced Threat Pr...
Stopped SharedRealitySvc Spatial Data Service
Stopped SessionEnv     Remote Desktop Configuration
Stopped SensrSvc       Sensor Monitoring Service
```

11. Számolja meg az objektumokat!

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

Count Name
-----
273 AarSvc_702b9 {AarSvc_702b9, AJRouter, ALG, AMD External Events Utility...}
```

12. Számolj meg az objektumok: max, min, avg, sum szerint!

```
Windows PowerShell
PS C:\Windows\System32> Get-Process | Measure-Object -Property id -Maximum -Minimum -Average -Sum

Count      : 215
Average    : 5953,33953488372
Sum        : 1279968
Maximum    : 14260
Minimum    : 0
Property   : Id

PS C:\Windows\System32>
```

13. Kérdezze le a Windows időt!

```
PS C:\> Get-Date -format "yyyy,HH:mm"
2022,13:03
```

14. Hozzon létre egy szöveg változót, melynek értéke: Miskolc

```
PS C:\> $szoveg = "Miskolc"
```


15.Végezze el a következő műveleteket:

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

16.Fájlkezelés

```
Windows PowerShell
PS C:\> $f = "C:\f5hv4g.txt"
PS C:\> $tartalom = Get-Content $f
PS C:\> $tartalom
PS C:\> echo $tartalom
PS C:\> $tartalom.Count
0
PS C:\> $tartalom
PS C:\> echo $tartalom
PS C:\> echo $tartalom
PS C:\> $tartlom = Get-Content $f
PS C:\> $tartalom = Get-Content $f
PS C:\> Get-Content $f
TÁrk Viktor
PS C:\> $tartalom
TÁrk Viktor
PS C:\> $tartalom.Count
1
PS C:\> Get-Item $f

Directory: C:\

Mode                LastWriteTime         Length Name
----                -
-a----          2022. 03. 02.   13:06           12 f5hv4g.txt

PS C:\> |
```