

```
Windows PowerShell
PS C:\Users\290398> $PSVT
PS C:\Users\290398> $PSVersionTable

Name                           Value
----                           -
PSVersion                      5.1.26100.2161
PSEdition                     Desktop
PSCompatibleVersions           {1.0, 2.0, 3.0, 4.0...}
BuildVersion                   10.0.26100.2161
CLRVersion                     4.0.30319.42000
WSManStackVersion              3.0
PSRemotingProtocolVersion      2.3
SerializationVersion           1.1.0.1

PS C:\Users\290398> Get-Host

Name       : ConsoleHost
Version    : 5.1.26100.2161
InstanceId : a1b39836-456c-4d52-a67e-d9de477fd9da
UI         : System.Management.Automation.Internal.Host.InternalHostUserInterface
CurrentCulture         : en-IN
CurrentUICulture       : en-US
PrivateData            : Microsoft.PowerShell.ConsoleHost+ConsoleColorProxy
DebuggerEnabled        : True
IsRunspacePushed       : False
Runspace              : System.Management.Automation.Runspaces.LocalRunspace

PS C:\Users\290398> $env
PS C:\Users\290398> $env:Computername
```

```
PS C:\Users\290398> $env
PS C:\Users\290398> $env:Computername
G6DR0F3
PS C:\Users\290398> $env:username
290398
PS C:\Users\290398> $env:userdomain
USTR
PS C:\Users\290398> $env:userprofile
C:\Users\290398
PS C:\Users\290398> $env:alluserprofile
PS C:\Users\290398> $env:comspec
C:\WINDOWS\system32\cmd.exe
PS C:\Users\290398> $env:homepath
\Users\290398
PS C:\Users\290398> $env:homedrive
C:
PS C:\Users\290398> $env:programfiles
C:\Program Files
PS C:\Users\290398>
```

Get-verb

```
Windows PowerShell
PS C:\Users\290398> get-verb

Verb      Group
-----
Add        Common
Clear      Common
Close      Common
Copy       Common
Enter      Common
Exit       Common
Find       Common
Format     Common
Get        Common
Hide       Common
Join       Common
Lock       Common
Move       Common
New        Common
Open       Common
Optimize   Common
Pop        Common
Push       Common
Redo       Common
Remove     Common
Rename     Common
Reset      Common
Resize     Common
Search     Common
Select     Common
Set        Common
Show       Common
Skip       Common
```

Command noun

```
Windows PowerShell
PS C:\Users\290398> get-command -noun *
```

CommandType	Name	Version	Source
Alias	Add-AppPackage	2.0.1.0	Appx
Alias	Add-AppPackageVolume	2.0.1.0	Appx
Alias	Add-AppProvisionedPackage	3.0	Dism
Alias	Add-MsixPackage	2.0.1.0	Appx
Alias	Add-MsixPackageVolume	2.0.1.0	Appx
Alias	Add-MsixVolume	2.0.1.0	Appx
Alias	Add-ProvisionedAppPackage	3.0	Dism
Alias	Add-ProvisionedAppSharedPackageContainer	3.0	Dism
Alias	Add-ProvisionedAppxPackage	3.0	Dism
Alias	Add-ProvisioningPackage	3.0	Provisioning
Alias	Add-TrustedProvisioningCertificate	3.0	Provisioning
Alias	Apply-WindowsUnattend	3.0	Dism
Alias	Disable-PhysicalDiskIndication	2.0.0.0	Storage
Alias	Disable-PhysicalDiskIndication	1.0.0.0	VMDirectStorage
Alias	Disable-StorageDiagnosticLog	2.0.0.0	Storage
Alias	Disable-StorageDiagnosticLog	1.0.0.0	VMDirectStorage
Alias	Dismount-AppPackageVolume	2.0.1.0	Appx
Alias	Dismount-MsixPackageVolume	2.0.1.0	Appx
Alias	Dismount-MsixVolume	2.0.1.0	Appx
Alias	Enable-PhysicalDiskIndication	2.0.0.0	Storage
Alias	Enable-PhysicalDiskIndication	1.0.0.0	VMDirectStorage
Alias	Enable-StorageDiagnosticLog	2.0.0.0	Storage
Alias	Enable-StorageDiagnosticLog	1.0.0.0	VMDirectStorage
Alias	Flush-Volume	2.0.0.0	Storage
Alias	Flush-Volume	1.0.0.0	VMDirectStorage
Alias	Get-AppPackage	2.0.1.0	Appx
Alias	Get-AppPackageAutoUpdateSettings	2.0.1.0	Appx
Alias	Get-AppPackageDefaultVolume	2.0.1.0	Appx
Alias	Get-AppPackageLastError	2.0.1.0	Appx

```
Windows PowerShell
+ ~ ~ ~
Function      Update-ScriptFileInfo      1.0.0.1      PowerShellGet
Function      Update-SmbMultichannelConnection 2.0.0.0      SmbShare
Function      Update-StorageBusCache     1.0.0.0      StorageBusCache
Function      Update-StorageFirmware     2.0.0.0      Storage
Function      Update-StoragePool         2.0.0.0      Storage
Function      Update-StorageProviderCache
- DscConfiguration      1.1          2.0.0.0      Storage      Cmdlet      Cmdlet      Cmdlet      Function
                        3.0.0.0      3.1.0.0      Microsoft.PowerShell.Utility      Cmdlet      Cmdlet      Update-FormatData
                        Microsoft.PowerShell.Core
1.0.0.0      LAPS      3.1.0.0      Microsoft.PowerShell.Utility
Cmdlet      Update-List      3.1.0.0      Microsoft.PowerShell.Utility
Cmdlet      Update-TypeData  3.1.0.0      Microsoft.PowerShell.Utility
Cmdlet      Update-UevTemplate 2.1.639.0    UEV
Cmdlet      Update-WIMBootEntry 3.0           Dism

PS C:\Users\290398> get-help -name write-warning -examples

NAME
Write-Warning

ALIASES
None

REMARKS
Get-Help cannot find the Help files for this cmdlet on this computer. It is displaying only partial help.
-- To download and install Help files for the module that includes this cmdlet, use Update-Help.
-- To view the Help topic for this cmdlet online, type: "Get-Help Write-Warning -Online" or
go to https://go.microsoft.com/fwlink/?LinkID=113430.

PS C:\Users\290398> update-help
update-help : Failed to update Help for the module(s) :
'AppBackgroundTask, AppLocker, AppvClient, Appx, AssignedAccess, BitLocker, BitsTransfer, BranchCache, CimCmdlets, ConfigCI,
```

A screenshot of a Windows PowerShell terminal window. The title bar reads "Windows PowerShell". The command prompt shows the user is in the directory "C:\Users\290398>". The command "Get-Help Write-Warning -Online" has been executed, and the output "get-process" is displayed. Below the command, a list of running processes is shown in a table format. The columns are: Handles, NPM(K), PM(K), WS(K), CPU(s), Id, SI, and ProcessName. The processes listed include AggregatorHost, ai, ApMsgFwd, ApntEx, Apoint, ApplicationFrameHost, ApRemote, armsvc, backgroundTaskHost, cloudmeteringhost, cmd, conhost, CrossDeviceService, CSFalconContainer, csrss, CsSystemTray_7.20.19011.0, ctfmon, DellFFDPWmiService, Dia Notifications, and dllhost. The taskbar at the bottom shows the date as 31-01-2025 and the time as 11:35. The system tray also shows the temperature as 29°C and the weather as Mostly cloudy.

Execution policy

```
PS C:\Users\290398>
PS C:\Users\290398> get-executionpolicy
Restricted
PS C:\Users\290398> set-executionpolicy -executionpolicy "unrestricted"
set-executionpolicy : Access to the registry key 'HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\PowerShell\1\ShellIds\Microsoft.PowerShell' is denied.
To change the execution policy for the default (LocalMachine) scope, start Windows PowerShell with the "Run as administrator" option. To
change the execution policy for the current user, run "Set-ExecutionPolicy -Scope CurrentUser".
At line:1 char:1
+ set-executionpolicy -executionpolicy "unrestricted"
+ ~~~~~
+ CategoryInfo          : PermissionDenied: (:) [Set-ExecutionPolicy], UnauthorizedAccessException
+ FullyQualifiedErrorId : System.UnauthorizedAccessException, Microsoft.PowerShell.Commands.SetExecutionPolicyCommand
```

To print something

```
PS C:\Users\290398> write-host "Hello worls"
Hello worls
PS C:\Users\290398>
```

```
PS C:\Users\290398> $myvar.gettype()

IsPublic IsSerial Name                                     BaseType
-----
True     True     Int32                                     System.ValueType

+ $myvar | getmember-
+
+ CategoryInfo          : ObjectNotFound: (getmember-:String) [], CommandNotFoundException
+ FullyQualifiedErrorId : CommandNotFoundException

PS C:\Users\290398> $myvar | get-member

TypeName: System.Int32

Name      MemberType Definition
-----
CompareTo Method    int CompareTo(System.Object value), int CompareTo(int value), int IComparable.CompareTo(System.Object obj), int IComp...
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 provider), string ToString(...
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\290398>
```

Predefine the data type

```

PS C:\Users\290398> [system.int32] $myint = "788"
PS C:\Users\290398> $myva
PS C:\Users\290398> $myint
788
PS C:\Users\290398> $myint.gettype()

IsPublic IsSerial Name                                     BaseType
-----
True     True     Int32                                     System.ValueType

PS C:\Users\290398> [system.string] $myint = 788
PS C:\Users\290398> $myint
788
PS C:\Users\290398> $myint.gettype()

IsPublic IsSerial Name                                     BaseType
-----
True     True     String                                    System.Object

PS C:\Users\290398>

```

```

PS C:\Users\290398> get-childitem | where-object { $_.name -Like "*.vscode" }

Directory: C:\Users\290398

Mode                LastWriteTime         Length Name
----                -
d-----          29-01-2025     09:53         .vscode

PS C:\Users\290398> get-childitem | where-object { $_.name -Like "*.ssh" }

Directory: C:\Users\290398

Mode                LastWriteTime         Length Name
----                -
d-----          14-01-2025     10:16         .ssh

PS C:\Users\290398> |

```

Clear a value

By setting value clear

```
Windows PowerShell
PS C:\Users\290398> $myvar
4
PS C:\Users\290398> $myvar.GetType()

IsPublic IsSerial Name                                     BaseType
-----
True     True     Int32                                     System.ValueType

PS C:\Users\290398> clear-variable -name my_int
clear-variable : Cannot find a variable with the name 'my_int'.
At line:1 char:1
+ clear-variable -name my_int
+ ~~~~~
+ CategoryInfo          : ObjectNotFound: (my_int:String) [Clear-Variable], ItemNotFoundException
+ FullyQualifiedErrorId : VariableNotFound,Microsoft.PowerShell.Commands.ClearVariableCommand

PS C:\Users\290398> clear-variable -name myvar
PS C:\Users\290398> $myvar
0
PS C:\Users\290398> $myvar -eq $null
False
PS C:\Users\290398> $str1="tyu kk"
PS C:\Users\290398> $str1
tyu kk
PS C:\Users\290398> clear-variable -name str1
PS C:\Users\290398> $str1
True
PS C:\Users\290398> $str1 -eq $null
True
PS C:\Users\290398>
```

Replacing

```
PS C:\Users\290398> $str1="erstgyh wdfgh."
PS C:\Users\290398> $str1.replace(".", "1")
erstgyh wdfgh1
PS C:\Users\290398> $str1 -replace(".", "1")
111111111111111
PS C:\Users\290398> $str1="erstgyh wdfgh."
PS C:\Users\290398> $str1 -replace(".", "")
erstgyh wdfgh

PS C:\Users\290398> $str1 -replace(".", "1")
111111111111111
PS C:\Users\290398> $str1="erstgyh wdfgh."
PS C:\Users\290398> $str1 -replace[regex]::escape(".") "1"
At line:1 char:36
+ $str1 -replace[regex]::escape(".") "1"
+ ~~~~~
Unexpected token '1' in expression or statement.
+ CategoryInfo          : ParserError: (:) [], ParentContainsErrorRecordException
+ FullyQualifiedErrorId : UnexpectedToken

PS C:\Users\290398> $str1 -replace[regex]::escape("."), "1"
erstgyh wdfgh1
PS C:\Users\290398> $str1 -replace[regex]::escape("1"), "1"
erstgyh wdfgh.
PS C:\Users\290398> $str1 -replace[regex]::escape("1"), "hh"
erstgyh wdfgh.
PS C:\Users\290398> $str1 -replace[regex]::escape("."), "hh"
erstgyh wdfghhh
```

This also similar put backslash

```
+ FullyQualifiedErrorId : UnexpectedToken

PS C:\Users\290398> $str1 -replace("\." , "bye" )
erstgyh wdfghbye
PS C:\Users\290398>
```