Powershell - Create Folder

[**Previous Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

[**Next Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

Cmdlet

**New-Item** cmdlet is used to create a directory by passing the path using -Path as path of the directory and -ItemType as Directory.

Example

In this example, we'll create a folder in D:\Temp\ with name "Test Folder"

Type the following command in PowerShell ISE Console

New-Item -Path 'D:\temp\Test Folder' -ItemType Directory

Output

You will see the following output.

Directory: D:\temp

Mode LastWriteTime Length Name

---- ------------- ------ ----

d---- 4/3/2018 7:06 PM Test Folder

Powershell - Create File

[**Previous Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

[**Next Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

Cmdlet

**New-Item** cmdlet is used to create a file by passing the path using -Path as path of the file and -ItemType as File.

Example

In this example, we'll create a file in D:\Temp\Test Folder with name "Test File.txt"

Type the following command in PowerShell ISE Console

New-Item -Path 'D:\temp\Test Folder\Test File.txt' -ItemType File

Output

You will see the following output.

Directory: D:\temp

Mode LastWriteTime Length Name

---- ------------- ------ ----

-a--- 4/3/2018 7:14 PM 0 Test File.txt

Powershell - Copy Folder

[**Previous Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

[**Next Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

Cmdlet

**Copy-Item** cmdlet is used to copy a directory by passing the path of the directory to be copied and destination path where the folder is to be copied.

Example 1

In this example, we'll copy a folder D:\Temp\Test Folder as D:\Temp\Test Folder1

Type the following command in PowerShell ISE Console

Copy-Item 'D:\temp\Test Folder' 'D:\temp\Test Folder1'

You can see the Test Folder1 in Windows Explorer created.

Example 2

In this example, we'll copy a folder recursively D:\Temp\Test Folder to D:\Temp\Test Folder1

Type the following command in PowerShell ISE Console

Copy-Item 'D:\temp\Test Folder' -Destination 'D:\temp\Test Folder1'

Powershell - Copy File

[**Previous Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

[**Next Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

Cmdlet

**Copy-Item** cmdlet is used to copy a file by passing the path of the file to be copied and destination path where the file is to be copied.

Example 1

In this example, we'll copy a folder D:\Temp\Test Folder\Test File.txt to D:\Temp\Test Folder1

Type the following command in PowerShell ISE Console

Copy-Item 'D:\temp\Test Folder\Test File.txt' 'D:\temp\Test Folder1\Test File1.txt'

You can see the Test File1.txt in Test Folder1 with content of Test File.txt. Test Folder1 folder should be present before running this command.

Example 2

In this example, we'll copy all text file recursively D:\Temp\Test Folder to D:\Temp\Test Folder1

Type the following command in PowerShell ISE Console

Copy-Item -Filter \*.txt -Path 'D:\temp\Test Folder' -Recurse -Destination 'D:\temp\Test Folder1'

Powershell - Delete Folder

[**Previous Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

[**Next Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

Cmdlet

**Remove-Item** cmdlet is used to delete a directory by passing the path of the directory to be deleted.

Example 1

In this example, we'll delete a folder D:\Temp\Test Folder1

Type the following command in PowerShell ISE Console

Remove-Item 'D:\temp\Test Folder1'

You can see the Test Folder1 in Windows Explorer is deleted now.

Example 2

In this example, we'll remove the folder D:\Temp\Test Folder1 recursively. In first example, PowerShell confirms if directory is not empty. In this case, it will simply delete the item.

Type the following command in PowerShell ISE Console

Remove-Item 'D:\temp\Test Folder' -Recurse

Powershell - Delete File

[**Previous Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

[**Next Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

Cmdlet

**Remove-Item** cmdlet is used to delete a file by passing the path of the file to be deleted.

Example 1

In this example, we'll delete a file D:\Temp\Test Folder\Test.txt

Type the following command in PowerShell ISE Console

Remove-Item 'D:\temp\Test Folder\test.txt'

You can see the Test Folder1 in Windows Explorer is deleted now.

Example 2

In this example, we'll remove the folder D:\Temp\Test Folder recursively deleting its all files. In first example, PowerShell confirms if directory is not empty. In this case, it will simply delete the item.

Type the following command in PowerShell ISE Console

Remove-Item 'D:\temp\Test Folder' -Recurse

Powershell - Move Folder

[**Previous Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

[**Next Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

Cmdlet

**Move-Item** cmdlet is used to move a directory by passing the path of the directory to be moved and destination path where the folder is to be moved.

Example 1

In this example, we'll move a folder D:\Temp\Test to D:\Temp\Test1

Type the following command in PowerShell ISE Console

Move-Item D:\temp\Test D:\temp\Test1

You can see the Test directory moved to Test1 directory in Windows Explorer.

Example 2

In this example, Create a file test.txt in Test folder in D:\Temp\ and then run the same command.

Type the following command in PowerShell ISE Console

Move-Item D:\temp\Test D:\temp\Test1

Powershell - Move File

[**Previous Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

[**Next Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

Cmdlet

**Move-Item** cmdlet is used to move a file by passing the path of the file to be moved and destination path where the file is to be moved.

Example 1

In this example, we'll move a folder D:\Temp\Test\Test.txt to D:\Temp\Test1

Type the following command in PowerShell ISE Console

Move-Item D:\temp\Test\Test.txt D:\temp\Test1

Powershell - Rename Folder

[**Previous Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

[**Next Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

Cmdlet

**Rename-Item** cmdlet is used to rename a folder by passing the path of the folder to be renamed and target name.

Example 1

In this example, we'll rename a folder D:\Temp\Test to D:\Temp\Test1

Type the following command in PowerShell ISE Console

Rename-Item "D:\temp\Test Test1"

Powershell - Rename File

[**Previous Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

[**Next Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

Cmdlet

**Rename-Item** cmdlet is used to rename a File by passing the path of the file to be renamed and target name.

Example 1

In this example, we'll rename a folder D:\Temp\Test\test.txt to test1.txt

Type the following command in PowerShell ISE Console

Rename-Item D:\temp\Test\test.txt test1.txt

Powershell - Retrieving Item

[**Previous Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

[**Next Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

Cmdlet

**Get-Content** cmdlet is used to retrieve content of a file as an array.

Example 1

In this example, we'll read a file D:\Temp\Test\Test.txt

Type the following command in PowerShell ISE Console

Get-Content D:\temp\Test\test.txt

Output

You can see following output in PowerShell console.

Get-Content D:\temp\test\test.txt

;This is a test file.

Example 2

In this example, we'll read the size of the content of the file read.

Type the following command in PowerShell ISE Console

(Get-Content D:\temp\test\test.txt).length

You can see following output in PowerShell console.

(Get-Content D:\temp\test\test.txt).length

20

Powershell - Check Folder Existence

[**Previous Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

[**Next Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

Cmdlet

**Test-Path** cmdlet is used to check existence of a folder.

Example 1

In this example, we're having a folder test in D:\temp directory

Type the following command in PowerShell ISE Console

Test-Path D:\temp\test

Output

You can see following output in PowerShell console.

Test-Path D:\temp\test

True

Example 2

In this example, we're not having a folder named test2 in D:\temp directory

Type the following command in PowerShell ISE Console

Test-Path D:\temp\test2

Output

You can see following output in PowerShell console.

Test-Path D:\temp\test2

False

Powershell - Check File Existence

[**Previous Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

[**Next Page**](https://www.tutorialspoint.com/powershell/powershell_files_folders.htm)

Cmdlet

**Test-Path** cmdlet is used to check existence of a file.

Example 1

In this example, we're having a file test.txt in D:\temp\test directory

Type the following command in PowerShell ISE Console

Test-Path D:\temp\test\test.txt

Output

You can see following output in PowerShell console.

Test-Path D:\temp\test\test.txt

True

Example 2

In this example, we're not having a file named test2.txt in D:\temp\test directory

Type the following command in PowerShell ISE Console

Test-Path D:\temp\test\test2.txt

Output

You can see following output in PowerShell console.

Test-Path D:\temp\test\test2.txt

False

Powershell - Set System Date

[**Previous Page**](https://www.tutorialspoint.com/powershell/powershell_dates_timers.htm)

[**Next Page**](https://www.tutorialspoint.com/powershell/powershell_dates_timers.htm)

Cmdlet

**Set-Date** cmdlet is used to set System Date.

In this example, we're using Get-Date to get current date

Type the following command in PowerShell ISE Console

Get-Date

Output

You can see following output in PowerShell console.

Get-Date

Saturday, May 05, 2018 9:58:06 AM

In this example, we're using Set-Date to add one more day to current date.

Type the following command in PowerShell ISE Console

set-date -Date (Get-Date).AddDays(1)

Output

You can see following output in PowerShell console.

Sunday, May 06, 2018 9:59:16 AM

Now revert back to substract added day to current date.

Type the following command in PowerShell ISE Console

set-date -Date (Get-Date).AddDays(-1)

Output

You can see following output in PowerShell console.

Saturday, May 05, 2018 10:00:37 AM

PowerShell Special variables store information about PowerShell. These are also called automatic variables. Following is the list of automatic variables −

Powershell - Create Text File

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

New-Item cmdlet is used to create a text file and Set-Content cmdlet to put content into it.

Step 1

In this example, we're creating a new text file named test.txt

Type the following command in PowerShell ISE Console

New-Item D:\temp\test\test.txt

You can see the test.txt created in D:\temp\test directory.

Step 2

In this example, we're adding content to test.txt.

Type the following command in PowerShell ISE Console

Set-Content D:\temp\test\test.txt 'Welcome to '

Step 3

In this example, we're reading content of test.txt.

get-Content D:\temp\test\test.txt

Output

You can see following output in PowerShell console.

Welcome to

Powershell - Read Text File

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

Get-Content cmdlet is used to read content of a text file.

In this example, we're reading content of test.txt.

Get-Content D:\temp\test\test.txt

Output

You can see following output in PowerShell console.

Welcome to

Powershell - Create XML File

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

New-Item cmdlet is used to create a xml file and Set-Content cmdlet to put content into it.

Step 1

In this example, we're creating a new xml file named test.xml

Type the following command in PowerShell ISE Console

New-Item D:\temp\test\test.xml -ItemType File

You can see the test.xml created in D:\temp\test directory.

Step 2

In this example, we're adding content to test.xml.

Type the following command in PowerShell ISE Console

Set-Content D:\temp\test\test.xml '<title>Welcome to </title>'

Step 3

In this example, we're reading content of test.xml.

Get-Content D:\temp\test\test.xml

Output

You can see following output in PowerShell console.

<title>Welcome to </title>

Powershell - Read XML File

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

Get-Content cmdlet is used to read content of a xml file.

In this example, we're reading content of test.xml.

Get-Content D:\temp\test\test.xml

Output

You can see following output in PowerShell console.

<title>Welcome to </title>

Powershell - Create CSV File

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

New-Item cmdlet is used to create a csv file and Set-Content cmdlet to put content into it.

Step 1

In this example, we're creating a new csv file named test.csv

Type the following command in PowerShell ISE Console

New-Item D:\temp\test\test.csv -ItemType File

You can see the test.csv created in D:\temp\test directory.

Step 2

In this example, we're adding content to test.csv.

Type the following command in PowerShell ISE Console

Set-Content D:\temp\test\test.csv 'Mahesh,Suresh,Ramesh'

Step 3

In this example, we're reading content of test.csv.

Get-Content D:\temp\test\test.csv

Output

You can see following output in PowerShell console.

Mahesh,Suresh,Ramesh

Powershell - Read CSV File

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

Get-Content cmdlet is used to read content of a csv file.

In this example, we're reading content of test.csv.

Get-Content D:\temp\test\test.csv

Output

You can see following output in PowerShell console.

Mahesh,Suresh,Ramesh

Powershell - Create HTML File

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

New-Item cmdlet is used to create a html file and Set-Content cmdlet to put content into it.

Step 1

In this example, we're creating a new html file named test.html

Type the following command in PowerShell ISE Console

New-Item D:\temp\test\test.html -ItemType File

You can see the test.html created in D:\temp\test directory.

Step 2

In this example, we're adding content to test.html.

Type the following command in PowerShell ISE Console

Set-Content D:\temp\test\test.html '<html>Welcome to </html>'

Step 3

In this example, we're reading content of test.html.

Get-Content D:\temp\test\test.html

Output

You can see following output in PowerShell console.

<html>Welcome to </html>

Powershell - Read HTML File

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

Get-Content cmdlet is used to read content of a html file.

In this example, we're reading content of test.html.

Get-Content D:\temp\test\test.html

Output

You can see following output in PowerShell console.

<html>Welcome to </html>

Powershell - Erase content of File

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

Clear-Content cmdlet can be used to erase content of a txt file.

In this example, we're erasing content of test.txt.

Clear-Content D:\temp\test\test.txt

Now, if we read content of test.txt.

Get-Content D:\temp\test\test.txt

Powershell - Append content to File

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

Add-Content cmdlet can be used to append content of a any file.

In this example, we're adding content of test.txt.

Step 1

In this example, we're set content in a new txt file named test.txt

Type the following command in PowerShell ISE Console

Set-Content D:\temp\test\test.txt 'Hello'

Step 2

In this example, we're appending content to test.html.

Type the following command in PowerShell ISE Console

Add-Content D:\temp\test\test.txt 'World!'

Step 3

In this example, we're reading content of test.html.

Get-Content D:\temp\test\test.txt

Output

You can see following output in PowerShell console.

Hello

World!

Cmdlets

A cmdlet or "Command let" is a lightweight command used in the Windows PowerShell environment. The Windows PowerShell runtime invokes these cmdlets at command prompt. You can create and invoke them programmatically through Windows PowerShell APIs. Following are advanced usage example of cmdlets.

Cmdlet

Get-Unique cmdlet can be used to get the unique objects from a sorted list of objects.

In this example, we're see the Get-Unique cmdlet in action.

Step 1

In this example, we're set list of strings in a variable.

Type the following command in PowerShell ISE Console

$list = "one","two","two","three","four","five"

Step 2

In this example, we're printing the original list of strings.

Type the following command in PowerShell ISE Console

$list

Output

You can see following output in PowerShell console.

one

two

two

three

four

five

Step 3

In this example, we're sorting the list and then get the unique values.

Type the following command in PowerShell ISE Console

$list | sort | get-unique

Output

You can see following output in PowerShell console.

five

four

one

three

two

Powershell - Measure-Object Cmdlet

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

Measure-Object cmdlet can be used to get the properties of the passed output such as min, max, size, count, line etc.

In these examples, we're see the Measure-Object cmdlet in action.

Example 1

In this example, first we've a file test.txt in D:\temp\test with content "Welcome to ".

Type the following command in PowerShell ISE Console

get-content D:\temp\test\test.txt | measure-object -character -line -word

Output

You can see following output in PowerShell console.

Lines Words Characters Property

----- ----- ---------- --------

1 3 29

Example 2

In this example, We'll count the no. of files present in current directory.

Type the following command in PowerShell ISE Console

Get-ChildItem | Measure-Object

Output

You can see following output in PowerShell console.

Count : 25

Average :

Sum :

Maximum :

Minimum :

Property :

Powershell - Get-ChildItem Cmdlet

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

Get-ChildItem cmdlet can be used to get the items or child items in one or more specific locations.

In these examples, we're see the Get-ChildItem cmdlet in action.

Example 1

In this example, first we've a file test.txt in D:\temp\test with content "Welcome to " and test1.txt with content "Hello World!" and "Welcome to " in two lines.

Get the file details in a variable.

$A = Get-ChildItem D:\temp\test\\*.txt

Get the file details using Format-Wide cmdlet.

Format-Wide -InputObject $A

Output

You can see following output in PowerShell console.

Directory: D:\temp\test

test.txt test1.txt

Example 2

Get the names of the items in current directory.

Type the following command in PowerShell ISE Console

Get-ChildItem -Name

Output

You can see following output in PowerShell console consider being in D:\temp\Test directory.

test.csv

test.txt

test.xml

test1.txt

Powershell - Start-Sleep Cmdlet

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

Start-Sleep cmdlet suspends the activity in a script or session for the particular period of time.

In these examples, we're see the Start-Sleep cmdlet in action.

Example 1

In this example, we'll suspend the current process for 15 seconds.

Start-Sleep -s 15

Output

You can see PowerShell console resumes after 15 seconds.

Example 2

In this example, we'll suspend the current process for 500 milliseconds.

Start-Sleep -m 500

Powershell - Read-Host Cmdlet

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

Read-Host cmdlet is used to read from the console.

In these example, we're see the Read-Host cmdlet in action.

Example

In this example, we'll ask the user to pass an input and read the input into a variable.

$choice = Read-Host "Please put your choice"

Powershell will show a popup to enter the value. Once you enter the value, it is saved in $choice variable. Now print the variable.

$choice

Output

You can see the value of variable.

1

Powershell - Invoke-History Cmdlet

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

Invoke-History cmdlet is used to run the command from the current session which are already run.

In these example, we're see the Invoke-History cmdlet in action.

Example

In this example, we'll show how to invoke last run command using Invoke-History. Call Invoke-History without parameter.

Invoke-History

Measure-Command { Get-EventLog "Windows PowerShell" }

Output

Days : 0

Hours : 0

Minutes : 0

Seconds : 0

Milliseconds : 11

Ticks : 116083

TotalDays : 1.34355324074074E-07

TotalHours : 3.22452777777778E-06

TotalMinutes : 0.000193471666666667

TotalSeconds : 0.0116083

TotalMilliseconds : 11.6083

Powershell - Add-History Cmdlet

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

Add-History cmdlet is used to add commands in current history.

In these example, we're see the Add-History cmdlet in action.

Example

In this example, we'll add first five history command to current history again.

> get-history

Id CommandLine

-- -----------

13 clear-history

14 get-history

15 dir

16 dir

17 dir

18 dir

> Get-history -count 5 | Add-history

Now get the history again to see the effect of Add-history.

> Get-history

Id CommandLine

-- -----------

13 clear-history

14 get-history

15 dir

16 dir

17 dir

18 dir

19 get-history

20 get-history -count 5 | Add-history

21 dir

22 dir

23 dir

24 get-history

25 get-history -count 5 | Add-history

Powershell - Get-History Cmdlet

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Page

Next Page

Cmdlet

Get-History cmdlet is used to get commands run in current session.

In these example, we're see the Get-History cmdlet in action.

Example

In this example, we'll get commands run in current history.

> get-history

Id CommandLine

-- -----------

13 clear-history

14 get-history

15 dir

16 dir

17 dir

18 dir