# File and Folder System Operations:

-Create new folder

-Create new file

-Copy folder

-Copy file

-Move folder

-Move file

-Delete/Remove Folder

-Delete/Remove File

-Get Content / Read data from file

-Check folder is present or not

-Check file is present or not

# Create Folder

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

# Create 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

# Copy Folder

## 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'

You can see the content of Test Folder1 in Windows Explorer where it contains both the Test Folder and test file.

# Copy File

## 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

Wildcard/Filter / pattern matching :

\*:any

Example:

\*.txt : any file name with extension .txt

Test.\*: any extension with filename Test

A\*.txt: any file which will start with A and extension can be any

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

You can see the content of Test Folder1 in Windows Explorer where it contains both the Test Folder and only text based file(s).

# Delete Folder

## 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

You can see the content of temp folder in Windows Explorer where its folders are now removed.

# Delete File

## 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

You can see the content of temp folder in Windows Explorer where its folder is now removed.

# Move Folder

## 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

You can see the content of Test1 directory in Windows Explorer where it contains both the Test directory and test file.

# Move File

## 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

You can see the Test.txt in Test1 directory now. Test.txt has been moved from Test to Test1.

# Rename Folder

## 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 D:\temp\Test1

You can see the Test directory as Test1 directory now. There should not be another folder with same name already in the temp directory otherwise PowerShell command will fail.

# Rename File

## 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

You can see the test.txt renamed to test1.txt in Windows explorer.

# Retrieving Item

## 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

# Check Folder Existence

## 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

# Check File Existence

## 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