Advanced Scripting   
cmdlets

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# Instructions

Answer all questions directly in this document. You will save and upload this completed document as your homework submission.

# Overview

This exercise will help you understand how to find and use cmdlets

# Setup

## Requirements

* PowerShell

# Task 1—Finding cmdlets

One of the most important things to understand to master PowerShell is how to find the cmdlets that are already written that may do what you need. If someone else wrote it you don’t need to.

## Steps

1. List all cmdlets on your system. Enter the command:  
   Get-Command  
   Record the last command in your list. Write-warning
2. Filtering commands with wildcards. Let’s say you want manage the processes on your computer. To find commands that might be applicable use wildcards (\*) around a word that you think might be included in the name of the cmdlet you are looking for. In our case maybe the word process. Enter the command:  
   get-command \*process\*
   1. From the list of commands, which command do you think would retrieve a list of processes?   
      get-process
   2. What is the source of that command? Microsoft.powershell.management
   3. What is the version of that command 3.1.0.0
3. Let’s see if you can find the command to format a disk. Using keywords and the \* wildcard find the command that will format a disk.
   1. Record you answer here. Format-volume
   2. What is the source of that command? storage
   3. What is the version of that command 2.0.0.0
4. Get a list of commands that are in the same module (source) as the command you discovered. To do this will need to use the -Module parameter. The module parameter takes the source as it’s value. If the source was foo, then the command would be get-command -Module foo.
   1. What is the first command that starts with the verb **get**? Get-DiskStorageNodeView
   2. What command(s) start with the verb **mount**? Mount-diskimage
5. Get a list of all the commands that use the verb mount. Enter the command  
   get-command -verb mount  
   or  
   get-command mount-\*
   1. What the last command in the list? Mount-windowsimage

# Task 2—The alias system

Explore the alias system.

## Steps

1. Get a list of all the aliases on your system. Enter the command:  
   get-alias
   1. What is the first alias in the list? %--> ForEach-Object
   2. What is the second alias in the list? ? -> Where-Object
2. Find a specific alias. What is **gin** an alias for? Enter the command:  
   get-alias iwr  
   What is gin an alias for? Get-ComputerInfo
3. To find all the aliases for a specific command use the -Definition parameter. To find all the aliases for Get-ChildItem, enter the command:  
   get-alias -Definition get-childitem
   1. How many aliases are there for get-childitem? 3
   2. What are they? dir -> Get-ChildItem gci -> Get-ChildItem ls -> Get-ChildItem

# Task 3—Creating aliases

In this task you will create a new alias for the cmdlet Get-ChildItem

## Steps

1. Create a new alias for Get-ChildItem called ListFiles. Enter the command:  
   **New-Alias -Name ListFiles -Value Get-ChildItem**
2. Try the alias out. Enter the command:  
   ListFiles
3. Show the list of aliases for get-childitem again. (hint: the up arrow is your friend)
   1. Is your new alias in the list? yes
4. Open a new PowerShell shell.
   1. Is your ListFiles alias there? no.
   2. How do you know? get-alias -Definition Get-ChildItem

# Deliverable

Upload this document with completed answers to I-Learn.