POWERSHELL SCRIPTING AND TOOLMAKING TRAPS

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https://github.com/jdhitsolutions/PowerShellScriptingTraps

MVP

Microsoft®
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Professional

OUCH!

Some things in PowerShell scripting will catch you if you aren’t careful.

SCOPE

The number one trap for beginners

Avoid referencing out of scope items

- Everything in PowerShell happens in a defined scope
- Global
  - Script
  - Function
    - Function
- PowerShell searches up the hierarchy
- PowerShell writes to the current scope*
  - PowerShell ISE shares a global scope
- Help about_scopes

PROFILE PITFALLS

- Don’t assume your code is finished if it runs in your script editor
  - VS Code’s console is far from finished
- Test it from the PowerShell console
- Test from a clean console with no profiles
  - `Powershell -noprofile`
- Even better, test in an entirely different system like a VM

STRINGS AND PATHS

- ✓ Avoid Concatenation
- ✓ Learn how to use variable expansion and subexpressions
- ✓ Learn how to use Join-Path
  - ✓ Better for different providers
  - ✓ Better cross-platform

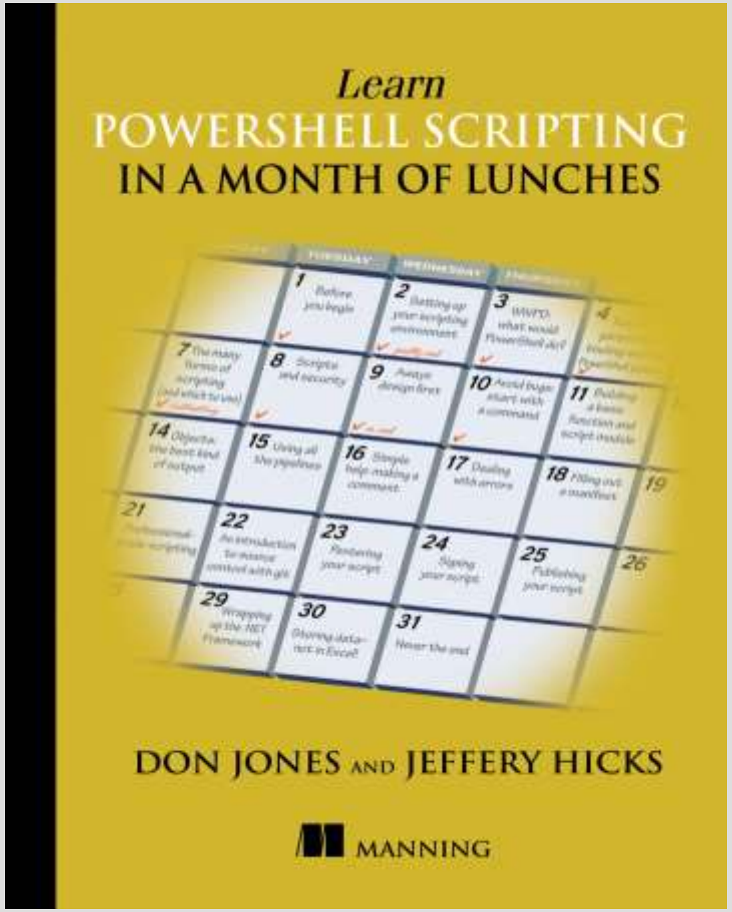
- `$file = 'bar.dat'`
- `$p = "C:\foo\" + $file`
- `+` is for adding numbers
- `$p = "C:\foo\$file"`
- `$b = Get-Service bits`
- `$b.name + " is " + $b.status`
- `"$($b.name) is $($b.status)"`
- `Join-Path c:\foo $file`
- `Join-Path "$env:Temp\data" test.txt`
- `Join-Path $env:Temp data\test.txt`

CODING INTO A CORNER

- Functions do one thing only
- Functions write one kind of object to the pipeline
- Don’t include formatting!
- Don’t send to an Out cmdlet

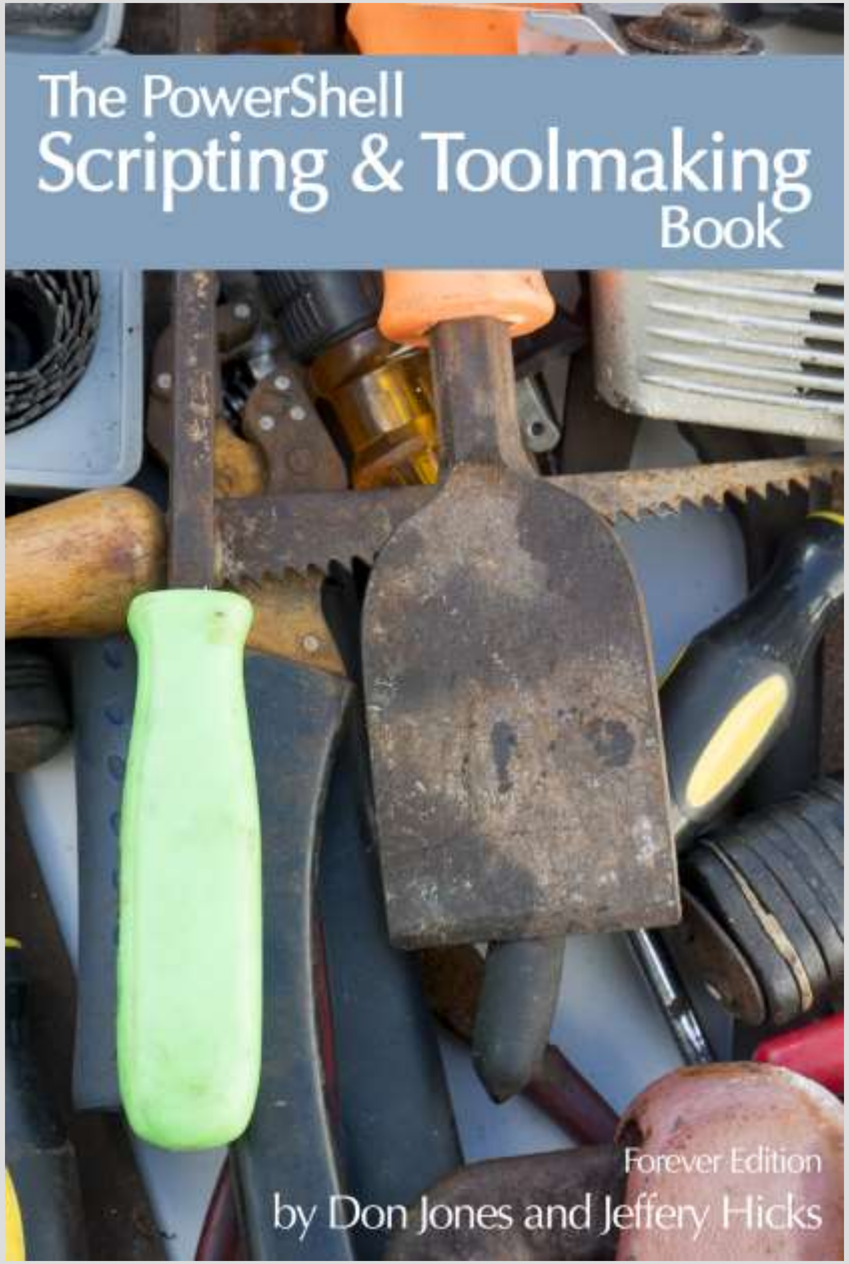
RESOURCES

https://www.manning.com/books/learn-powershell-scripting-in-a-month-of-lunches



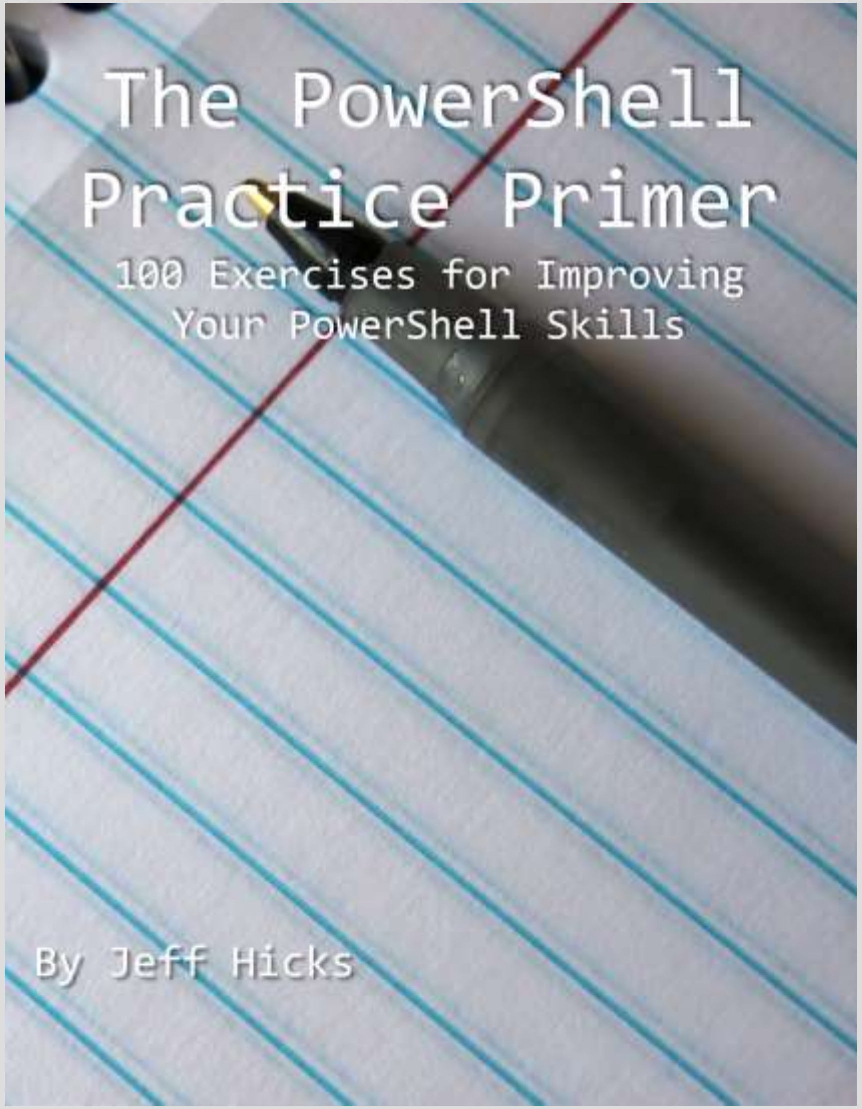
RESOURCES

https://leanpub.com/powershell-scripting-toolmaking/



RESOURCES

https://leanpub.com/psprimer



The PowerShell Practice Primer

100 Exercises for Improving Your PowerShell Skills

By Jeff Hicks

ANSWERS

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