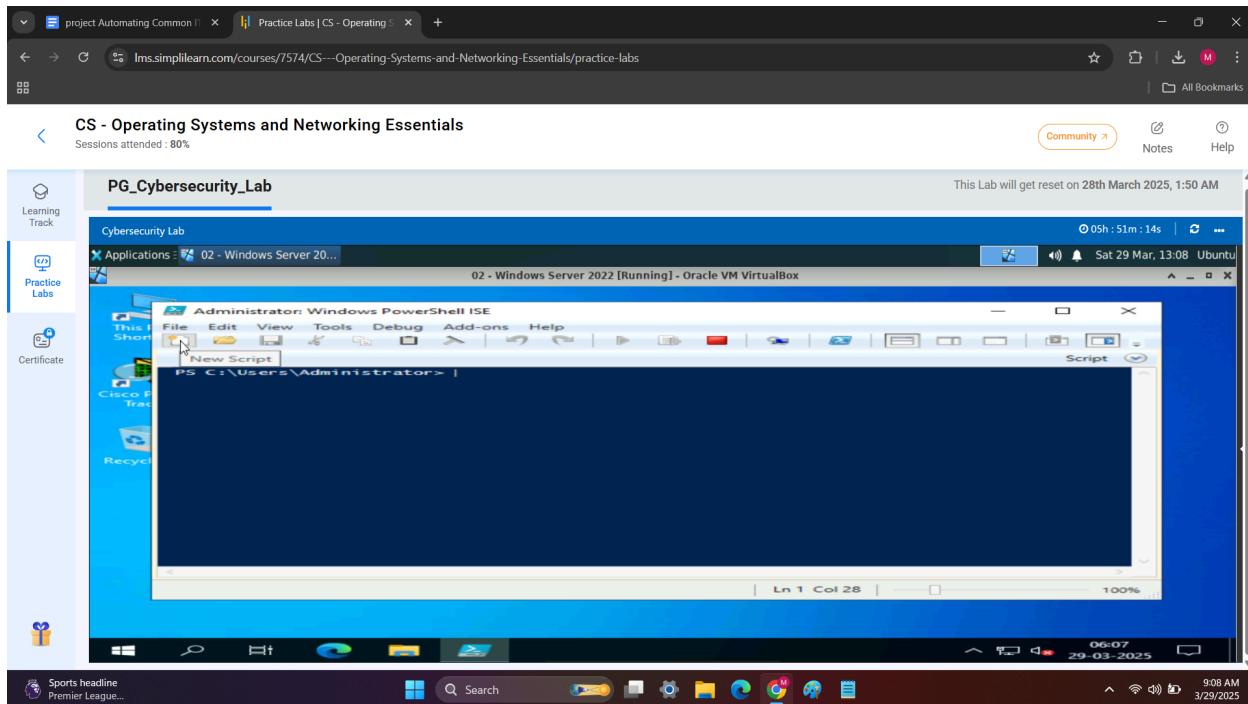


Automating Common IT Tasks:

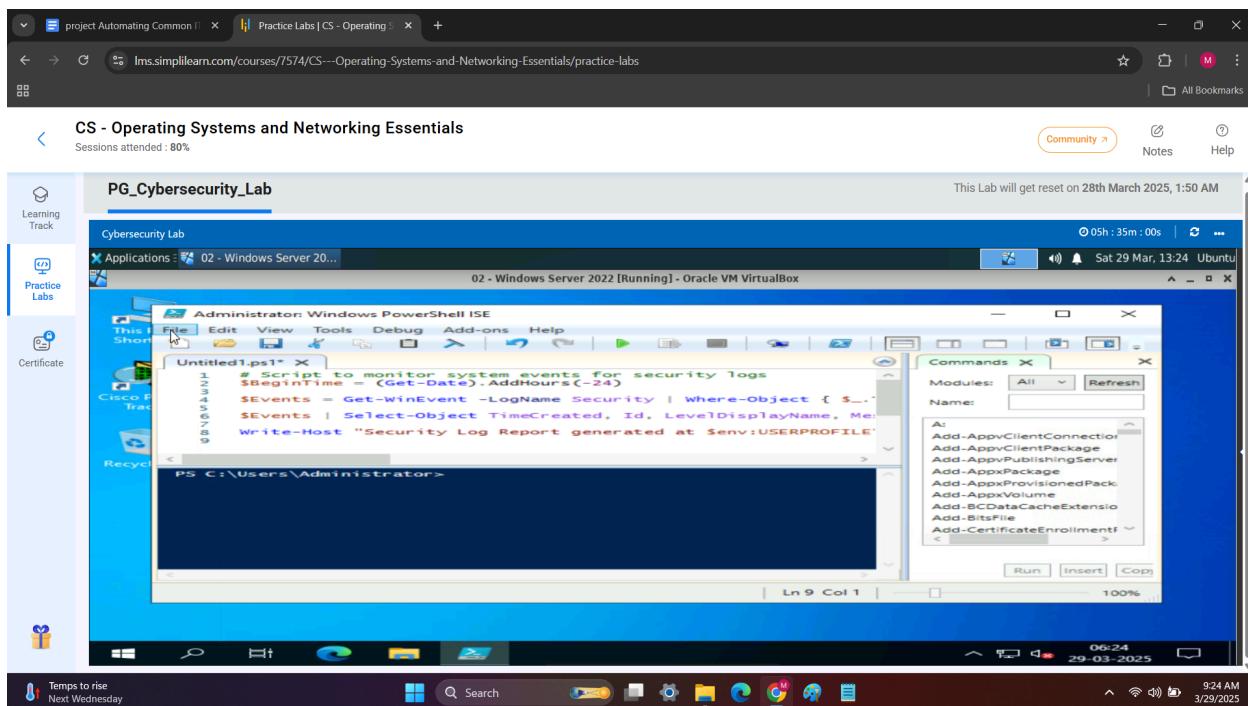
Michael Warner 3/29/25

Step 1: Evaluate strategies for automating system monitoring:

1.5 Click on the New Script icon on the top left corner



1.6 Type the below mentioned script inside the notepad console and then select File from the top left corner and click on Save As



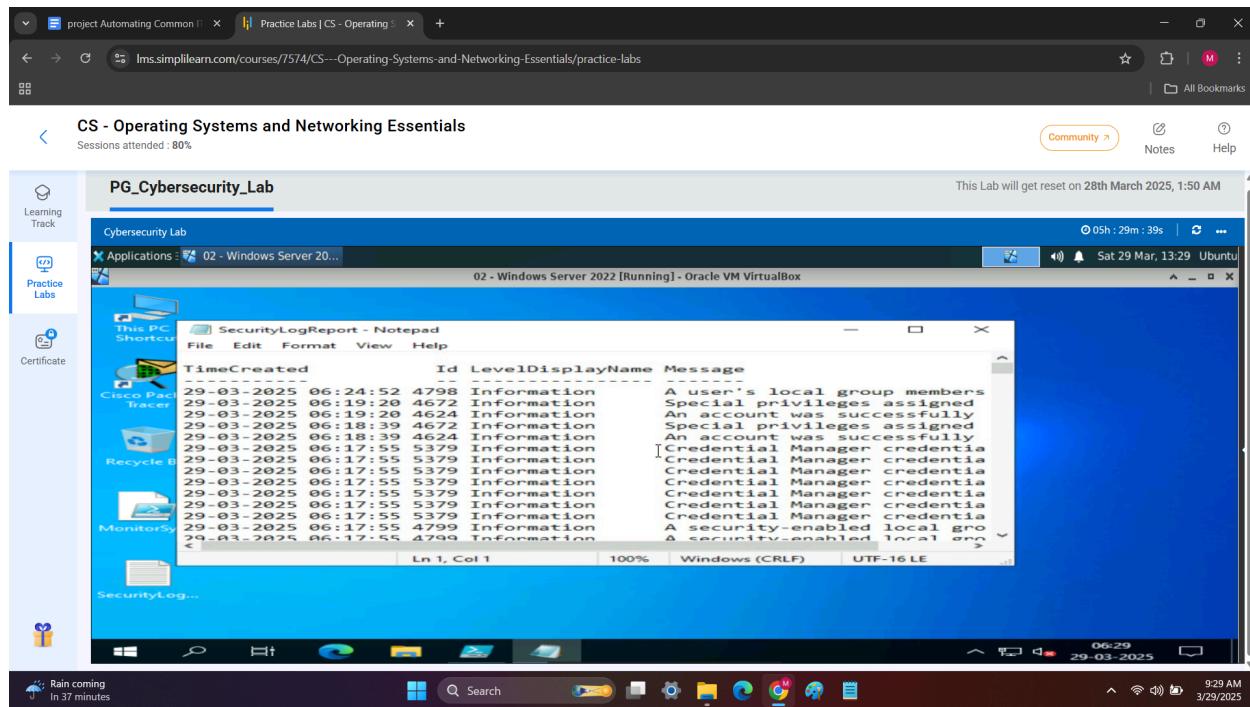
1.8 Run the following command to navigate to the script location: cd Desktop

A screenshot of a Windows Server 2022 desktop environment within a virtual machine. The taskbar at the bottom shows icons for File Explorer, Edge browser, Task View, and other system tools. The Start menu is open, showing options like This PC, Shortcuts, and Network. A Microsoft Edge browser window is open to 'lms.simplilearn.com/courses/7574/CS---Operating-Systems-and-Networking-Essentials/practice-labs'. A PowerShell window titled 'Administrator: Windows PowerShell ISE' is active, displaying the command 'PS C:\Users\Administrator> cd Desktop'. The command has been executed successfully, as indicated by the output 'PS C:\Users\Administrator\Desktop> |' and the status bar message 'Completed'.

1.9 Run the following command to execute the script: .\MonitorSystemEvents.ps1

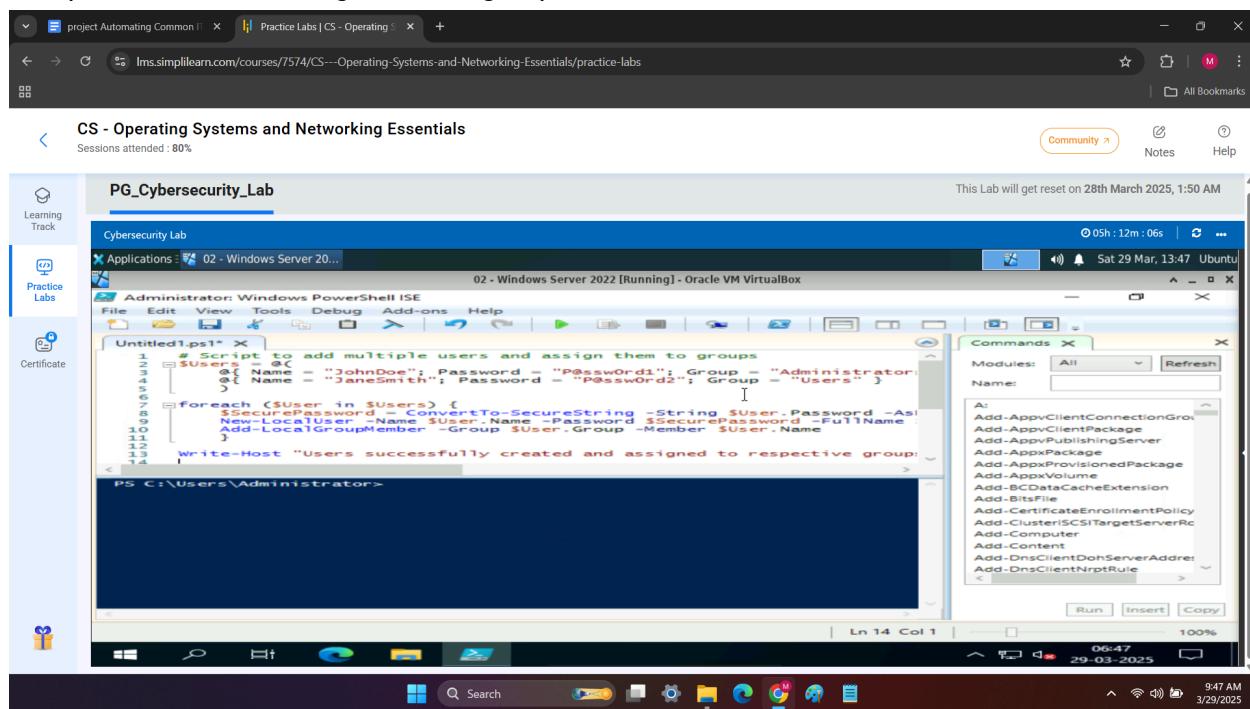
A screenshot of a Windows Server 2022 desktop environment within a virtual machine. The taskbar at the bottom shows icons for File Explorer, Edge browser, Task View, and other system tools. The Start menu is open, showing options like This PC, Shortcuts, and Network. A Microsoft Edge browser window is open to 'lms.simplilearn.com/courses/7574/CS---Operating-Systems-and-Networking-Essentials/practice-labs'. A PowerShell window titled 'Administrator: Windows PowerShell ISE' is active, displaying the command 'PS C:\Users\Administrator> .\MonitorSystemEvents.ps1'. The command has been executed successfully, as indicated by the output 'PS C:\Users\Administrator\Desktop> Security Log Report generated at C:\Users\Administrator\Desktop\Secu...' and the status bar message 'Completed'.

1.10 Minimize the PowerShell window and browse for a file named SecurityLogReport.txt containing the filtered security events

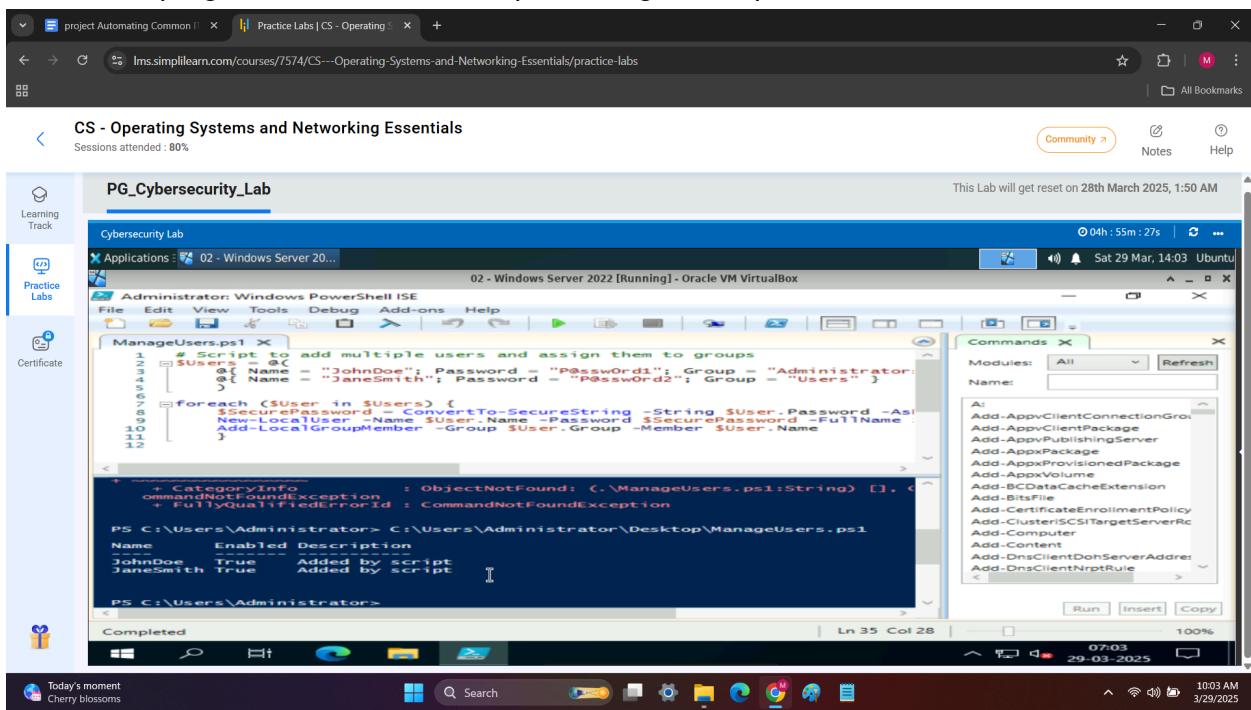


Step 2: Analyze methods to optimize user management:

2.1 Repeat step 1.5 to open a new script and type the following script to add multiple users, set their passwords, and assign them to groups

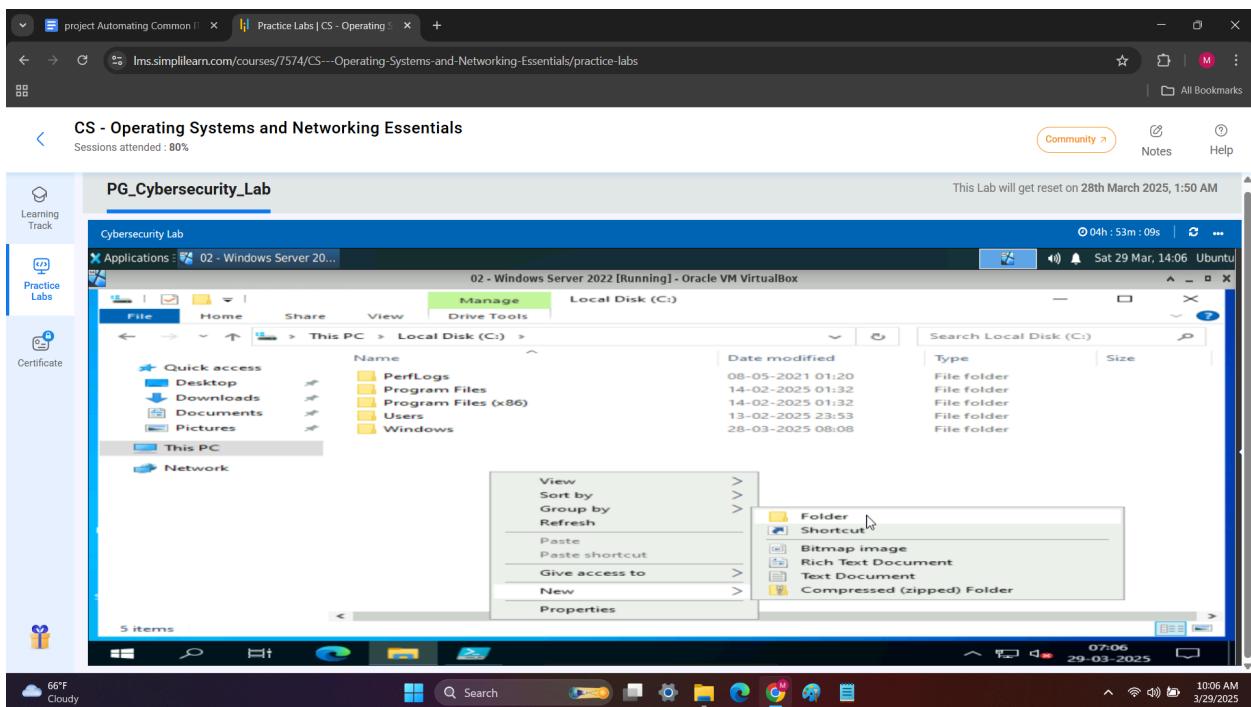


2.3 Run the program to execute the script .\ManageUsers.ps1

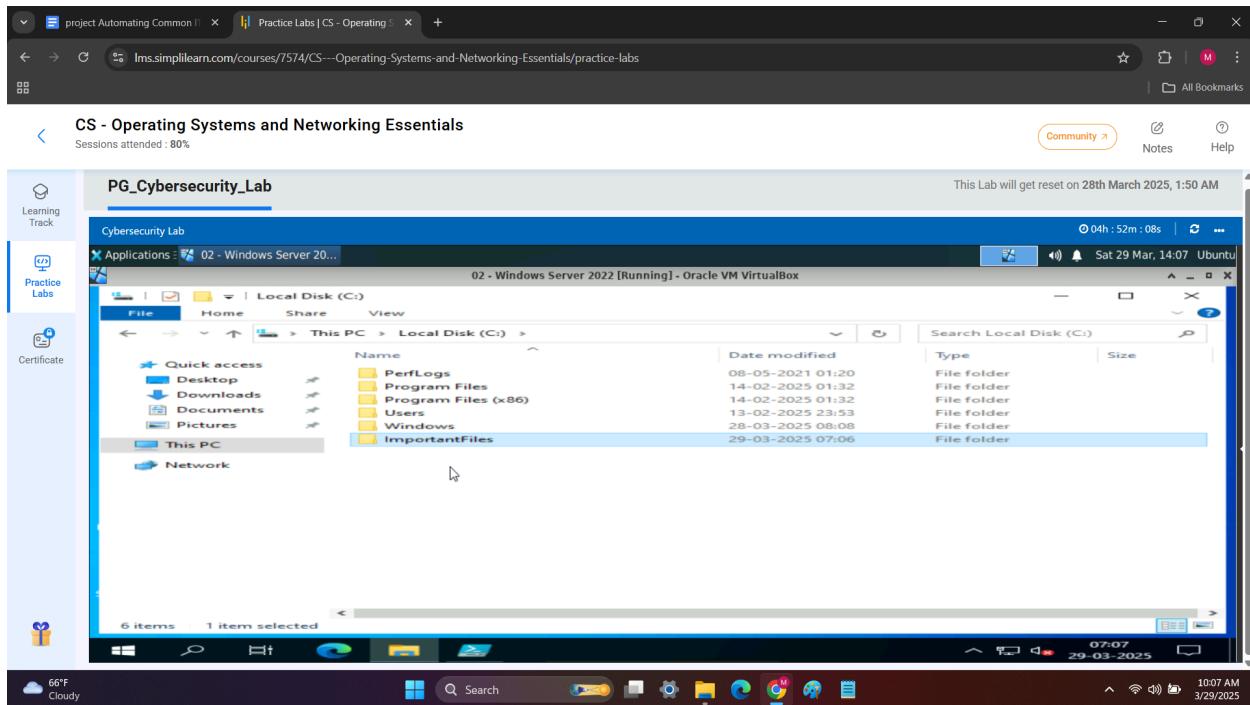


Step 3: Create a streamlined process for file management:

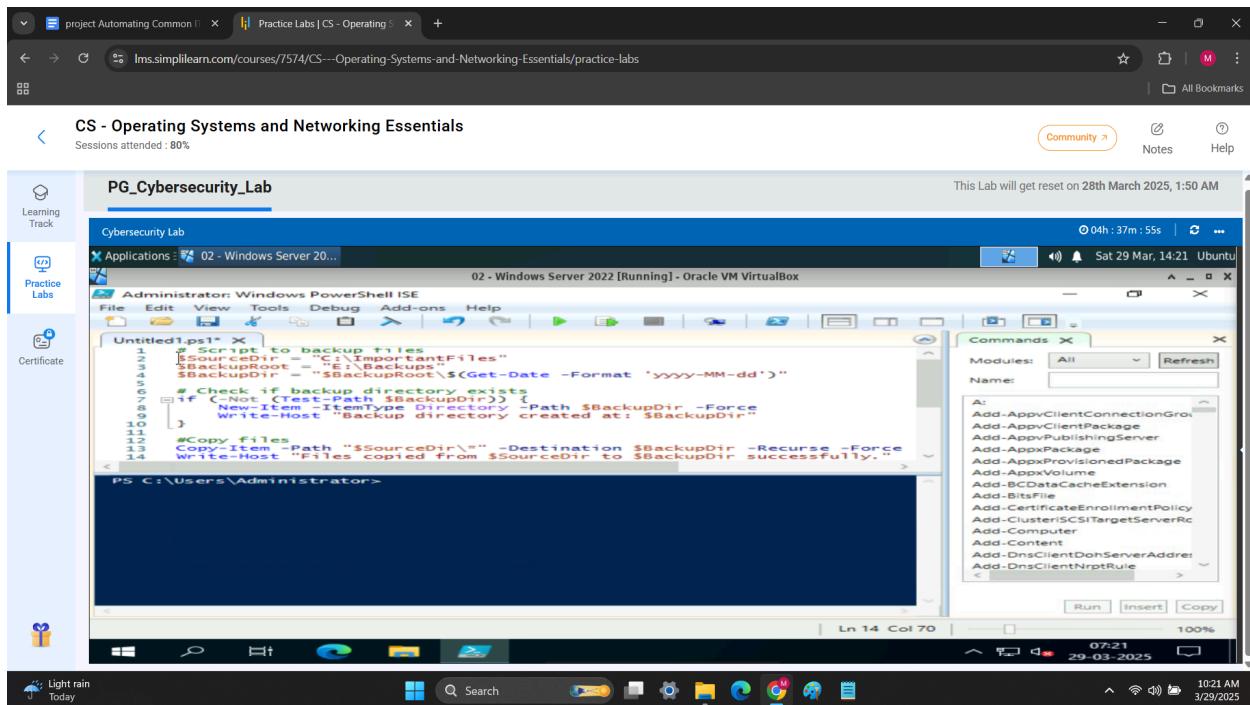
3.2 Navigate to This PC and open C Drive then right-click on blank space and select New and click on Folder



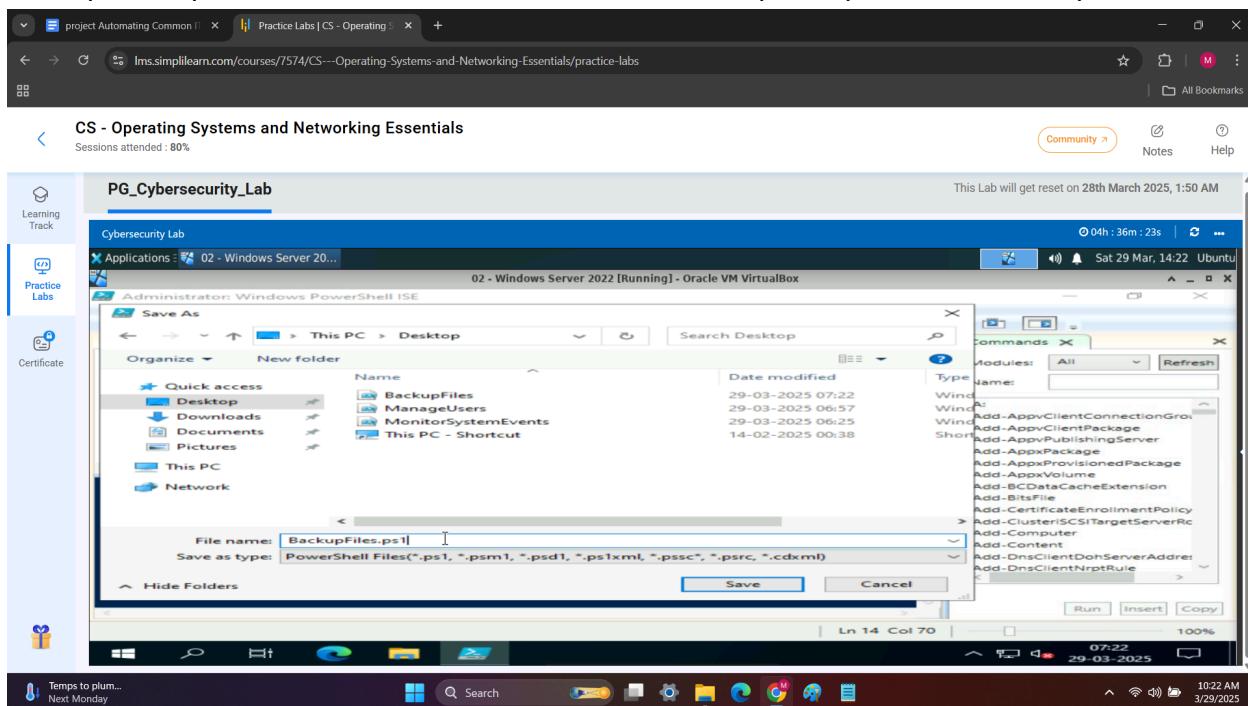
3.3 Name the folder as ImportantFiles and save it



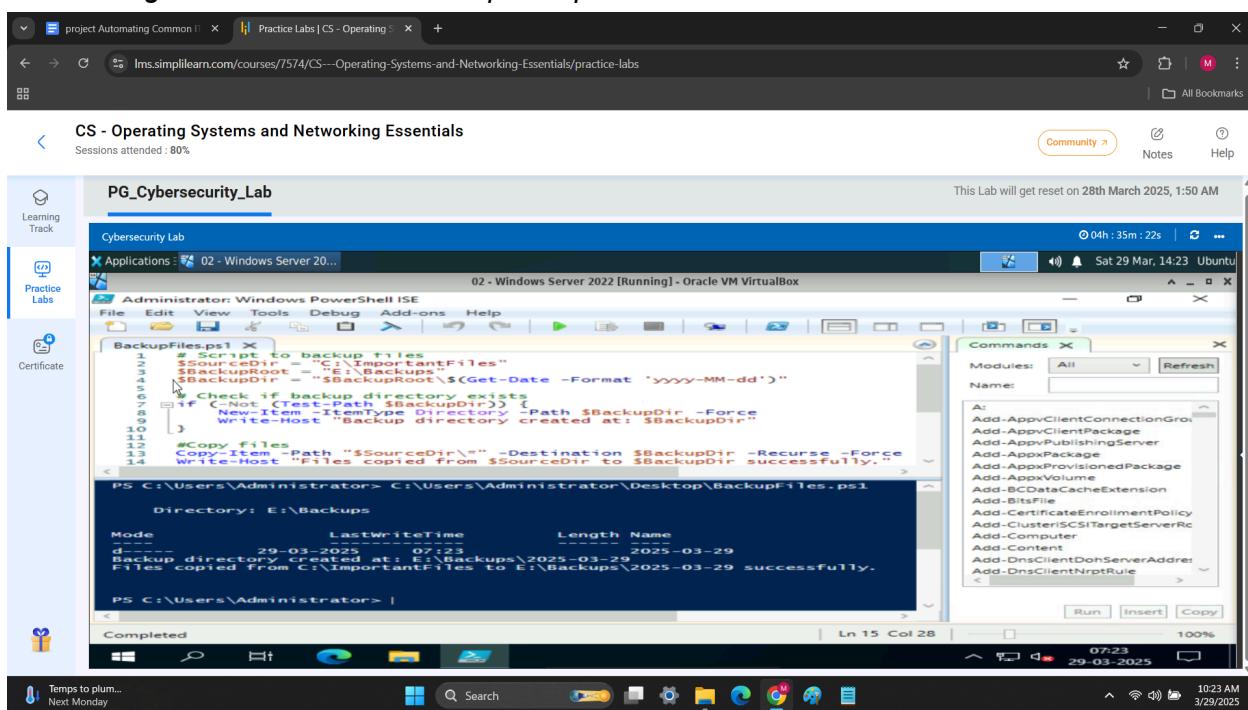
3.4 Navigate back to PowerShell and repeat step 1.5. Type the following script to implement file backup in the E Drive:



3.5 Repeat step 2.3 and save the file with the name BackupFiles.ps1 on the desktop

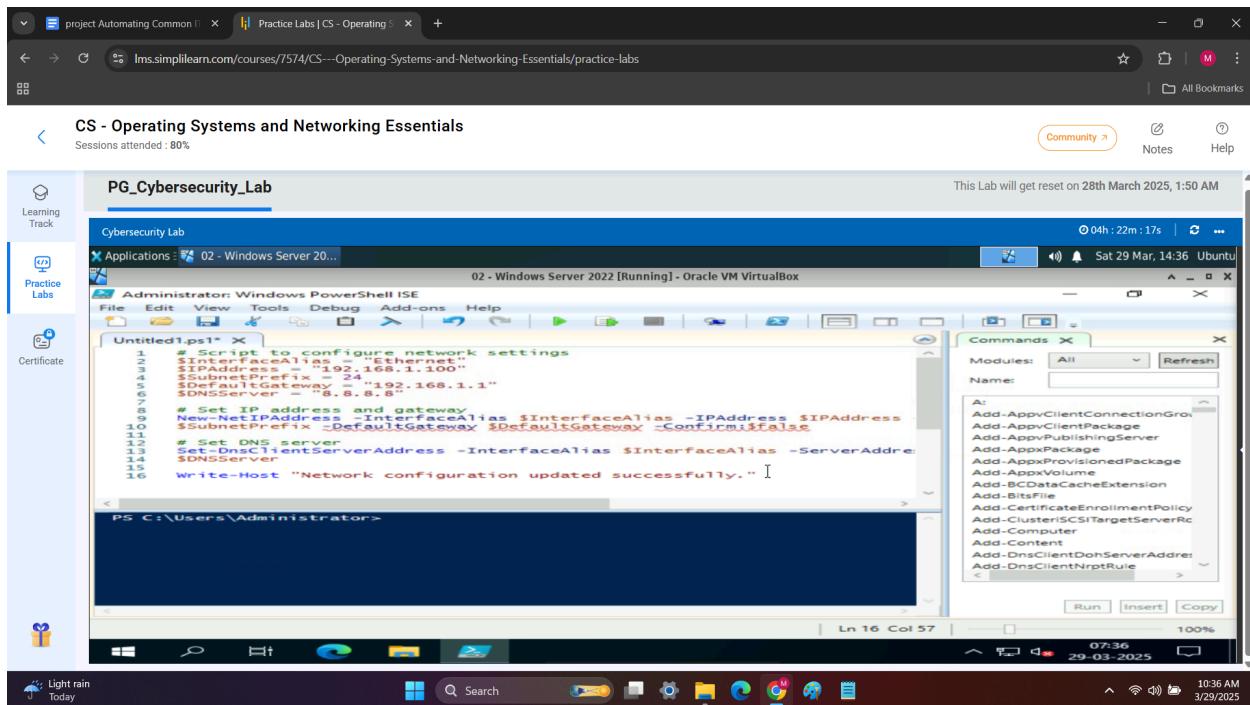


3.6 Run the following command to execute the script of backing up files of the C drive to the D drive having the current date: .\BackupFiles.ps1



Step 4: Design an approach for network configuration:

4.1 Repeat step 2.1 to write the script for performing network configuration



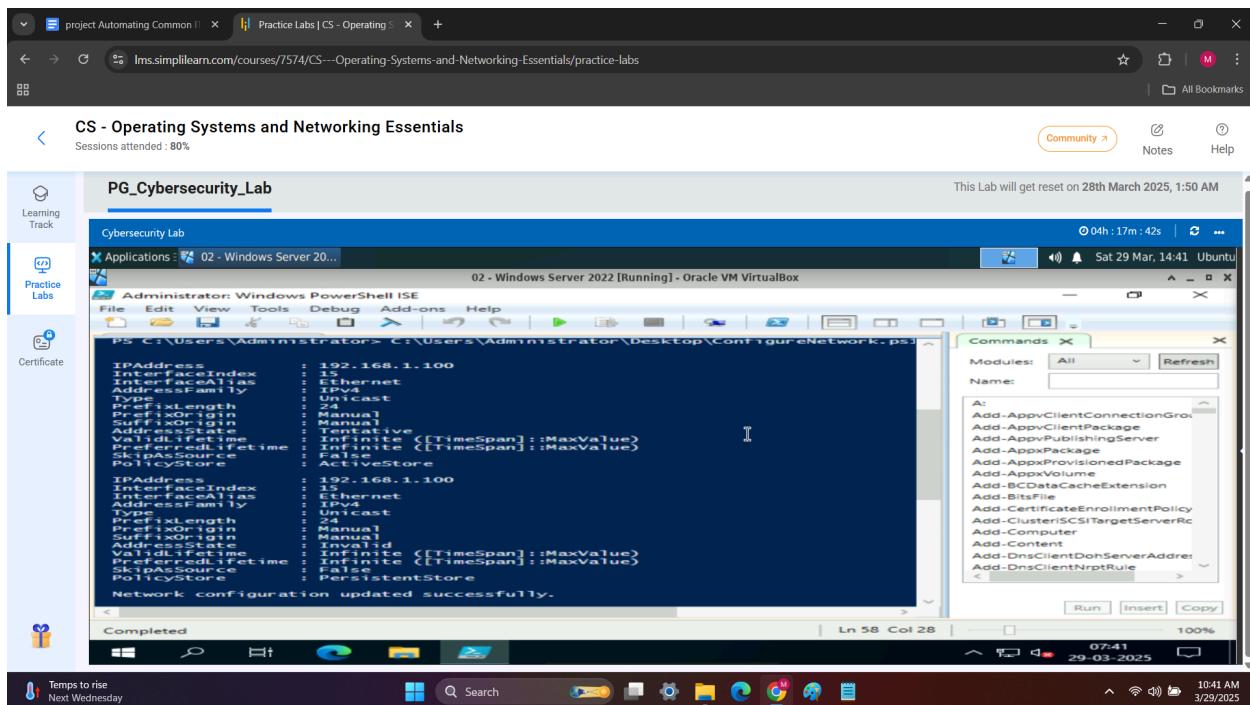
```
# Script to configure network settings
$InterfaceAlias = "Ethernet"
$IPAddress = "192.168.1.100"
$SubnetPrefix = "24"
$DefaultGateway = "192.168.1.1"
$DNSServer = "8.8.8.8"

# Set IP address and gateway
New-NetIPAddress -InterfaceAlias $InterfaceAlias -IPAddress $IPAddress
$SubnetPrefix $DefaultGateway $DefaultGateway -Confirm:$false

# Set DNS server
Set-DnsClientServerAddress -InterfaceAlias $InterfaceAlias -ServerAddress $DNSServer

Write-Host "Network configuration updated successfully."
```

4.3 Run the following command to execute the script that updates the network adapter settings with the new IP configuration: .\ConfigureNetwork.ps1



```
IPAddress          : 192.168.1.100
InterfaceIndex     : 15
InterfaceAlias     : Ethernet
AddressFamily      : IPv4
Type              : Unicast
PrefixLength       : Manual
SuffixOrigin       : Manual
Address           : 192.168.1.100
ValidLifetime     : Infinite (([TimeSpan]::.MaxValue))
PreferredLifetime : Infinite (([TimeSpan]::.MaxValue))
SkipSource        : False
PolicyStore       : ActiveStore

IPAddress          : 192.168.1.100
InterfaceIndex     : 15
InterfaceAlias     : Ethernet
AddressFamily      : IPv4
Type              : Unicast
PrefixLength       : Manual
SuffixOrigin       : Manual
Address           : 192.168.1.100
ValidLifetime     : Infinite (([TimeSpan]::.MaxValue))
PreferredLifetime : Infinite (([TimeSpan]::.MaxValue))
SkipSource        : False
PolicyStore       : PersistentStore

Network configuration updated successfully.
```

4.4 Run the following command to verify the new changes: ipconfig Get-NetIPAddress

```
Administrator: Windows PowerShell ISE
File Edit View Tools Debug Add-ons Help
PS C:\Users\Administrators> Get-NetIPAddress
AddressFamily      : IPv6
InterfaceIndex     : 10
InterfaceAlias    : Internet
Type               : Unicast
PrefixLength       : 64
PrefixOrigin       : WellKnown
SubnetMask         : ::ffff:ffff:ffff:ffff::/64
AddressState       : Preferred
ValidLifetime      : Infinite {[TimeSpan]::MaxValue}
PreferredLifetime : Infinite {[TimeSpan]::MaxValue}
SkipSource          : False
PolicyStore        : ActiveStore
Address           : fe80::a4dc:712:b52:f10c%10
InterfaceIndex     : 1
InterfaceAlias    : Ethernet
Type               : Unicast
PrefixLength       : 64
PrefixOrigin       : WellKnown
SubnetMask         : ::ffff:ffff:ffff:ffff::/64
AddressState       : Preferred
ValidLifetime      : Infinite {[TimeSpan]::MaxValue}
PreferredLifetime : Infinite {[TimeSpan]::MaxValue}
SkipSource          : False
PolicyStore        : ActiveStore
Address           : fe80::d0bc:c3d9:1cc4:550d%11
InterfaceIndex     : 1
InterfaceAlias    : Ethernet
Type               : Unicast
PrefixLength       : 64
PrefixOrigin       : WellKnown
SubnetMask         : ::ffff:ffff:ffff:ffff::/64
AddressState       : Preferred
ValidLifetime      : Infinite {[TimeSpan]::MaxValue}
PreferredLifetime : Infinite {[TimeSpan]::MaxValue}
SkipSource          : False
PolicyStore        : ActiveStore
```