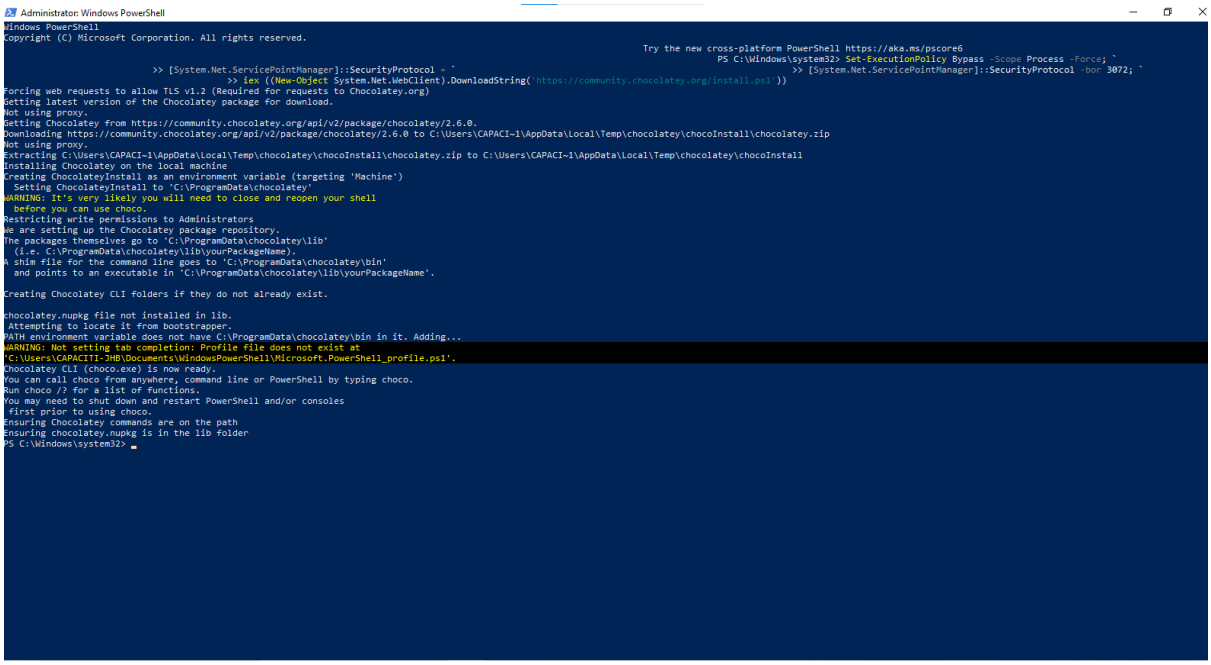
Course 3: User & File Management

1. User Creation



Explanation:

I opened Windows PowerShell in Administrator mode to obtain elevated privileges required for system-level operations. I created a new local user using the net user command and verified successful creation by listing system users. This demonstrates user account management within the Windows operating system.

2. File and Permission Management

```
PATH environment variable does not have C:\ProgramData\chocolatey\bin in it. Adding...
WARNING: Not setting tab completion: Profile file does not exist at
'C:\Users\CAPACITI-JHB\Documents\WindowsPowerShell\Microsoft.PowerShell_profile.ps1'.
Chocolatey CLI (choco.exe) is now ready.
You can call choco from anywhere, command line or PowerShell by typing choco.
Run choco /? for a list of functions.
You may need to shut down and restart PowerShell and/or consoles
 first prior to using choco.
Ensuring Chocolatey commands are on the path
Ensuring chocolatey.nupkg is in the lib folder
PS C:\Windows\system32> net user testuser123 Password@123 /add
The command completed successfully.

PS C:\Windows\system32> net user

User accounts for \\DESKTOP-70F0ITP

-------------------------------------------------------------------------------
Administrator            CAPACITI-JHB             DefaultAccount
Guest                    postgres                 testuser123
WDAGUtilityAccount
The command completed successfully.

PS C:\Windows\system32>
```

```
PS C:\Windows\system32> mkdir C:\PowerUserTest


    Directory: C:\


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
d-----         2026/02/24     08:35                PowerUserTest


PS C:\Windows\system32>
```

Explanation:

I created a test directory and used the icacls command to modify Access Control Lists (ACLs). Full control permissions were granted to the newly created user. This demonstrates practical understanding of file system security and permission structures in Windows.

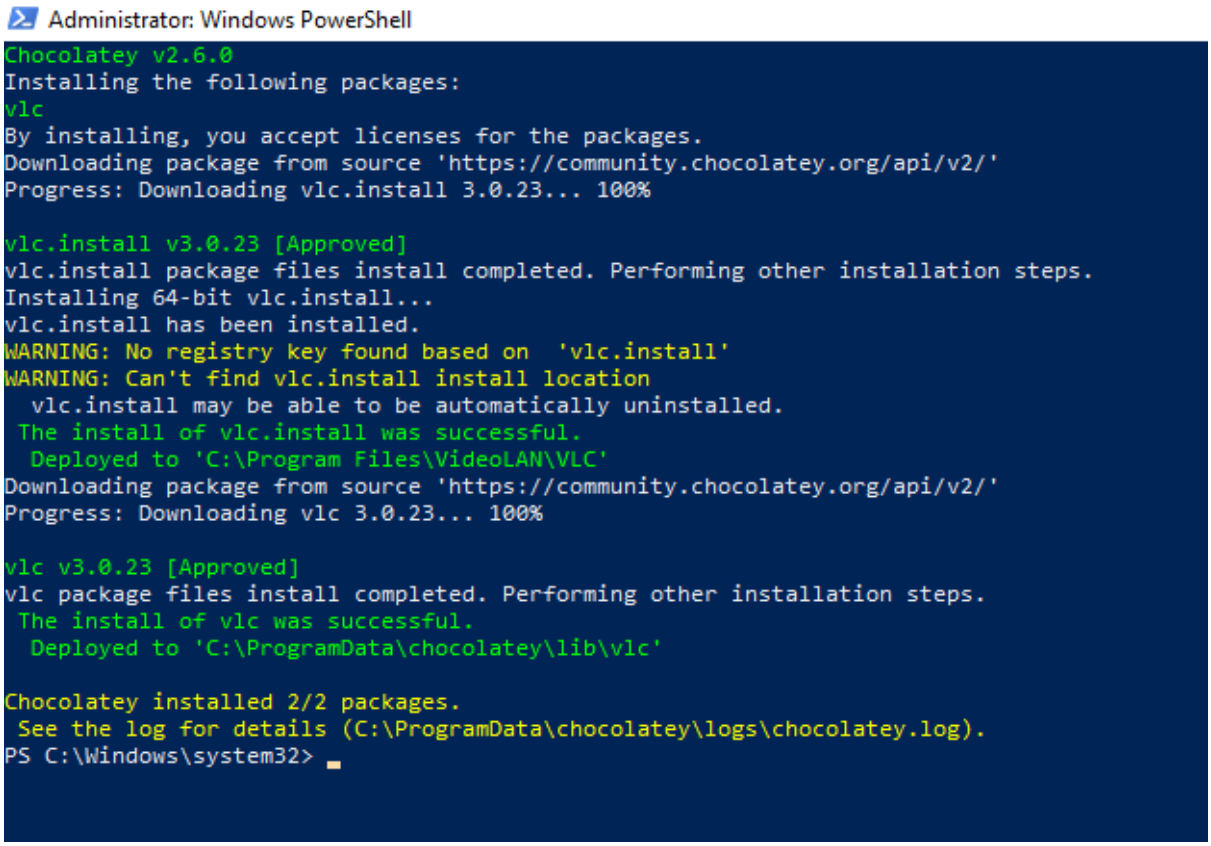
3. Package Management Using CLI

```
WARNING: Not setting tab completion: Profile file does not exist at
'C:\Users\CAPACITI-JHB\Documents\WindowsPowerShell\Microsoft.PowerShell_profile.ps1'.
Chocolatey CLI (choco.exe) is now ready.
You can call choco from anywhere, command line or PowerShell by typing choco.
Run choco /? for a list of functions.
You may need to shut down and restart PowerShell and/or consoles
 first prior to using choco.
Ensuring Chocolatey commands are on the path
Ensuring chocolatey.nupkg is in the lib folder
PS C:\Windows\system32> net user testuser123 Password@123 /add
The command completed successfully.

PS C:\Windows\system32> net user

User accounts for \\DESKTOP-70F0ITP

-------------------------------------------------------------------------------
Administrator            CAPACITI-JHB             DefaultAccount
Guest                    postgres                 testuser123
WDAGUtilityAccount
The command completed successfully.

PS C:\Windows\system32> mkdir C:\PowerUserTest


    Directory: C:\


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
d-----        2026/02/24     08:35                PowerUserTest


PS C:\Windows\system32> icacls C:\PowerUserTest /grant testuser123:F
processed file: C:\PowerUserTest
Successfully processed 1 files; Failed processing 0 files
PS C:\Windows\system32> icacls C:\PowerUserTest
C:\PowerUserTest DESKTOP-70F0ITP\testuser123:(F)
                 BUILTIN\Administrators:(I)(OI)(CI)(F)
                 NT AUTHORITY\SYSTEM:(I)(OI)(CI)(F)
                 BUILTIN\Users:(I)(OI)(CI)(RX)
                 NT AUTHORITY\Authenticated Users:(I)(M)
                 NT AUTHORITY\Authenticated Users:(I)(OI)(CI)(IO)(M)

Successfully processed 1 files; Failed processing 0 files
PS C:\Windows\system32>
```

```
googlechrome v145.0.7632.110 [Approved]
GoogleChrome package files install completed. Performing other installation steps.
WARNING: Unable to find the architecture of the installed Google Chrome application
Downloading googlechrome 64 bit
  from 'https://dl.google.com/dl/chrome/install/googlechromestandaloneenterprise64.msi'

Download of googlechromestandaloneenterprise64.msi (-1 B) completed.
Error - hashes do not match. Actual value was 'AE349E9683BC095CBD34E3D2333C374EBC911516DAE81AD624E9B67948996315'.
ERROR: Checksum for 'C:\Users\CAPACITI-JHB\AppData\Local\Temp\chocolatey\GoogleChrome\145.0.7632.110\googlechromestandaloneenterprise64.msi' did not meet '47bc8b7e57edb63a897d572e8e37ba870daeeeacd6eb053b1ca00c0a9a35d3fd'
hecksum type 'sha256'. Consider passing the actual checksums through with --checksum --checksum64 once you validate the checksums are appropriate. A less secure option is to pass --ignore-checksums if necessary.
The install of GoogleChrome was NOT successful.
Error while running 'C:\ProgramData\chocolatey\lib\GoogleChrome\tools\chocolateyInstall.ps1'.
 See log for details.

Chocolatey installed 2/3 packages. 1 packages failed.
 See the log for details (C:\ProgramData\chocolatey\logs\chocolatey.log).

Failures
 - GoogleChrome (exited -1) - Error while running 'C:\ProgramData\chocolatey\lib\GoogleChrome\tools\chocolateyInstall.ps1'.
 See log for details.
```

Explanation:

I initially attempted to install Google Chrome using the Chocolatey package manager via the Choco install command. However, the installation failed due to a checksum validation error, indicating a mismatch between the downloaded file and the expected SHA256 hash. To maintain secure package management practices and avoid bypassing integrity verification, I proceeded to install VLC media player successfully using Chocolatey. This demonstrates command-line software installation, repository usage, and proper package integrity handling within the Windows environment.



4. Conclusion

Through this practical task, I demonstrated understanding of operating system internals, user and group management, file system permissions, and package management. I used administrative privileges to perform system-level operations and applied CLI tools to manage software installation efficiently.