**Complementary Exercise**

**Basic PowerShell Commands and Scripting**

Michell needs to create a PowerShell command to manage files and directories. She will develop a script to automate a specific task and then document the entire process.

**Part 1: Basic Commands**

1. **Navigating Directories**
   * **Command:** Get-ChildItem
   * **Explanation:** Lists all files and directories in the current directory.
   * **Example:**
   * Get-ChildItem
2. **Creating a Directory**
   * **Command:** New-Item -ItemType Directory
   * **Explanation:** Creates a new directory.
   * **Example:**
   * New-Item -Path "C:\ExampleDirectory" -ItemType Directory
3. **Creating a File**
   * **Command:** New-Item -ItemType File
   * **Explanation:** Creates a new file.
   * **Example:**
   * New-Item -Path "C:\ExampleDirectory\example.txt" -ItemType File
4. **Copying a File**
   * **Command:** Copy-Item
   * **Explanation:** Copies a file from one location to another.
   * **Example:**
   * Copy-Item -Path "C:\ExampleDirectory\example.txt" -Destination "C:\ExampleDirectory\example\_copy.txt"
5. **Moving a File**
   * **Command:** Move-Item
   * **Explanation:** Moves a file from one location to another.
   * **Example:**
   * Move-Item -Path "C:\ExampleDirectory\example\_copy.txt" -Destination "C:\ExampleDirectory\SubDirectory\example\_copy.txt"
6. **Deleting a File**
   * **Command:** Remove-Item
   * **Explanation:** Deletes a file.
   * **Example:**
   * Remove-Item -Path "C:\ExampleDirectory\example.txt"

**Part 2: Creating a Simple Script**

1. **Objective:** Create a PowerShell script that creates a directory, creates a file within that directory, writes some text to the file, and then displays the content of the file.
2. **Script:**
   * **Step 1:** Open a text editor (e.g., Notepad) and write the following script:
   * # Create a new directory
   * New-Item -Path "C:\ExampleScriptDirectory" -ItemType Directory
   * # Create a new file in the directory
   * New-Item -Path "C:\ExampleScriptDirectory\example\_script.txt" -ItemType File
   * # Write text to the file
   * Add-Content -Path "C:\ExampleScriptDirectory\example\_script.txt" -Value "Hello, PowerShell!"
   * # Display the content of the file
   * Get-Content -Path "C:\ExampleScriptDirectory\example\_script.txt"
   * **Step 2:** Save the file with a .ps1 extension, for example, example\_script.ps1.
   * **Step 3:** Open PowerShell and navigate to the directory where you saved the script.
   * **Step 4:** Run the script by typing:
   * .\example\_script.ps1
3. **Explanation:**
   * **New-Item -Path “C:\ExampleScriptDirectory” -ItemType Directory:** Creates a new directory named ExampleScriptDirectory.
   * **New-Item -Path “C:\ExampleScriptDirectory\example\_script.txt” -ItemType File:** Creates a new file named example\_script.txt in the directory.
   * **Add-Content -Path “C:\ExampleScriptDirectory\example\_script.txt” -Value “Hello, PowerShell!”:** Writes the text “Hello, PowerShell!” to the file.
   * **Get-Content -Path “C:\ExampleScriptDirectory\example\_script.txt”:** Displays the content of the file.