1. What is the Structure of every CMDLet?
   1. **CMDlet uses a verb-noun structure. The verb represents the action and the noun represents the object. For example Get-help**
2. Define each character as it pertains to PowerShell.
   1. <> = **These are place holder texts – you don’t use the angle brackets in the command.**
   2. [ ] = **retrieves elements in arrays or hashtables.**
   3. - = **Hyphen tells powershell that item is a command.**
   4. { } = **curly brackets enclose a block of code.**
3. When is a parameter optional? Provide an example of an optional parameter.
   * 1. **By default all powershell parameters are defined as optional. To set a parameter as mandatory you must do this before powershell runs the cmdlet.**
     2. **<Get-History -Count 6> “-Count 6” would be considered an optional parameter.**
4. How many parameter sets are in the following commands:
   1. Group-Object – **1 parameter set.**
   2. Get-Unique – **2 parameter sets.**
   3. Get-Member – **1 parameter set.**
   4. Invoke-Command – **13 unique parameter sets**
   5. Resolve-Path – **2 parameter sets**
   6. Get-ADComputer – **3 parameter sets**
   7. Get-ADUser – **3 parameter sets**
   8. Get-Service – **3 parameter sets**
   9. Move-Item – **2 parameter sets**
5. Look up the parameter sets for Get-Service. What parameters are unique to each set?
   1. Which parameters are common?
      * 1. **[-ComputerName <string[]>]**
        2. **[-DependentServices]**
        3. **[-RequiredServices]**
        4. **[-Include <string[]>]**
        5. **[-Exclude <string[]>]**
        6. **[<CommonParameters>**
6. When Get-Service is typed out, why does it run without any parameters? **Because parameters are not mandatory, every parameter is considered optional. Adding parameters will lower run-time for the command.**
7. The Get-ChildItem command has how many parameter sets? Within those parameters are there any that are positional? If there are positional parameters? List them.  
   **There are 2 parameter sets within the Get-ChildItem command. There are 17 positional parameters within this command.**
   * 1. **Attributes**
     2. **Depth**
     3. **Directory**
     4. **Exclude**
     5. **File**
     6. **Filter**
     7. **FollowSymlink**
     8. **Force**
     9. **Hidden**
     10. **Include**
     11. **LiteralPath**
     12. **Name**
     13. **Path**
     14. **ReadOnly**
     15. **Recurse**
     16. **System**
     17. **UseTransaction**
8. The Add-Computer command has how many parameter sets? Within those parameters  
   are there any that are positional? If there are positional parameters, please list them.

**There are 2 parameter sets in the Add-Computer command. There are 16 positional parameters.**

* 1. **ComputerName**
  2. **Confirm**
  3. **Credential**
  4. **DomainName**
  5. **Force**
  6. **LocalCredential**
  7. **NewName**
  8. **OUpath**
  9. **Options**
  10. **PassThru**
  11. **Restart**
  12. **Server**
  13. **UnjoinDomainCredential**
  14. **Unsecure**
  15. **WhatIf**
  16. **WorkgroupName**

1. Does this command run? Get-EventLog Application 0,1 -newest
   1. If it doesn't, fix the code so that it runs.

**No, it does not. You need to define a parameter for the ‘-newest’ command. When reviewing the get-help command, it must be an integer. Here is the corrected command with the newest 10 on the EventLog**

**< Get-EventLog Application 0,1 -newest 10>**

1. Would this command run? Get-Eventlog -Newest 5 0,1 application
   1. If it doesn't, fix the code so that it runs.

**This command will not run, you defined the application before the application command. To get this to run you must move 0,1 after the application command is sent.**

**< Get-Eventlog -Newest 5 application 0,1>**

1. I want to find the list of logs in security. I would like to see the first 35. I would also like to see all the warnings and errors. Please provide the command

**< Get-EventLog -LogName Security -Error Inquire -WarningAction Inquire -Newest 35>**

**You do not need to define warnings and errors as they will be automatically included. However, for the purpose of this question I included the search to only look for Warnings and Errors.**

1. How could I find the parameter set for import-csv? What is the command

**< get-help import-csv -ShowWindow>**

1. I want to see if the service BITS is running. What is the command to find that out? **< Get-Service BITS >**
   1. Now that we can see the status of BITS what is the code to start it?
      * 1. **< Start-BitsTransfer -Source "C:\Users\Btrin\OneDrive\Desktop\TEST.txt" -Destination "C:\Users\Btrin\test1">**
        2. **Verify - <** **Get-Service BITS >**
        3. **ALSO: <Start-Service BITS>**
   2. Now that BITS it is running what is the command to stop it?
      * 1. **<Stop-Service BITS>**
2. I have an application that was working perfectly for a few weeks but now has started to give me issues. I want to check the logs to see if there is a conflict or any other type of errors. What is the command that would display the logs for the past week? (You will  
   have to find the correct parameter by reading the examples.)

**< Get-EventLog -LogName Application -ErrorAction Inquire -WarningAction Inquire -InformationVariable Inquire -Before 9/16 -After 9/9>**