**Module 4: Formatting Output**

1. Display a table of processes that includes only the process names, IDs, and whether or not they’re responding to Windows (the Responding property has that information). Have the table take up as little horizontal room as possible, but don’t allow any information to be truncated.

They are two ways by which we can be able to get the desired result specified above. They are:

get-process | select Name,ID,Responding | ft -autosize –wrap (ft – format-table)

or

get-process | ft Name,ID,Responding -autosize -Wrap

1. Display a table of processes that includes the process names and IDs. Also include columns for virtual and physical memory usage, expressing those values in megabytes (MB).  
     
   We will be getting the process name, ID and the amount of virtual and physical memory used by the processes using any of the below two cmdlets:

**get-process | select Name,ID,@{l='VirtualMB';e={$\_.vm/1mb}},  
@{l='PhysicalMB';e={$\_.workingset/1MB}}| ft –autosize**

**(or)**

**get-process | format-table Name,ID,@{l='VirtualMB';e={$\_.vm/1mb}},  
@{l='PhysicalMB';e={$\_.workingset/1MB}} -autosize**

1. Use Get-EventLog to display a list of available event logs. (Hint: you’ll need to read the help to learn the correct parameter to accomplish that.) Format the output as a table that includes, in this order, the log display name and the retention period. The column headers must be “LogName” and “RetDays.”

We will be able to get display a table of the above displayed conditions using the below cmdlet:

**Get-EventLog -List | Format-Table @{l='LogName';e={$\_.LogDisplayname}},**

**@{l='RetDays';e={$\_.MinimumRetentionDays}} -autosize**

1. Display a list of services so that a separate table is displayed for services that are started and services that are stopped. Services that are started should be displayed first. (Hint: you’ll use a -groupBy parameter).  
     
   We will be able to display the list of services that are started and stopped by using the following cmdlet

**Get-Process | sort status –descending | ft –GroupBy status**

1. Get all files in your Windows directory that have a 2 digit number as part of the name.  
     
   **dir c:\windows | where {$\_.name -match "\d{2}"}**
2. Find all processes running on your computer that are from Microsoft and display the process ID, name and company name. Hint: Pipe Get-Process to Get-Member to discover property names.  
     
   **get-process | where {$\_.company -match "^Microsoft"} | Select Name,ID,Company**
3. In the Windows Update log, usually found in C:\Windows, you want to display only the lines where the agent began installing files. You may need to open the file in Notepad to figure out what string you need to select.

**get-content .\WindowsUpdate.log | Select-string "Start[\w+\W+]+Agent: Installing Updates"**