

*Research assignment topic: What is the difference between CMD and Powershell?*

About - Command Prompt (CMD) is the traditional command line interface in Windows (for executing input commands originating from the MS-DOS legacy), whereas Powershell (PS) is a more advanced command-line shell and scripting language that extends the CMD capabilities with more flexibility and control particularly for sys admin and IT automation.

*PS is an object-oriented language and command shell that interprets user commands from a high-level language into a low-level or machine language to work with the OS and can create cross-platform task automation solutions making up of a command-line shell, a scripting language, and a configuration management framework. It can run on Windows, Linux and MacOS. The output of CMD commands is text-string whereas the output of PS cmdlets is in object form.*

Their comparative differences are:

<b>PowerShell</b>	<b>Command Prompt</b>
PowerShell was introduced in the year 2006.	CMD was introduced in the year 1981.
It can be opened from run by typing PowerShell.	It can be opened from the run by typing CMD.
It can operate with both batch commands and PowerShell cmdlets.	It can work only with Batch commands.
It provides the ability to create aliases for cmdlets or scripts. This can help the user to navigate between the functions easily.	It doesn't support the creation of aliases of commands.
Output from a cmdlet can be passed to other cmdlets.	Output from a command can't be passed on to other commands.
Output is in the form of an object	Output from a command is just text.
Can execute a sequence of cmdlets put together in a script.	In CMD, a command must be finished before the next command is run.
Help command is available to get information regarding any cmdlets.	No such help option is available for information regarding commands.
It has an ISE.	There is only a command-line interface, no separate ISE.
It has access to programming libraries as it is built on .net framework.	No such access to libraries.
It can integrate directly with WMI.	We need some external plugins for WMI interaction.

I can connect with Microsoft cloud products.	It doesn't have the ability to connect with MS online products.
Supports Linux systems.	It doesn't support Linux systems.
It can be used to run all types of programs.	It can run only console-type programs.