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Content for this document was derived from the following internet sources:

- <https://www.sconstantinou.com/powershell-profiles/>
- <https://stackoverflow.com/questions/43015262/change-color-of-first-input-word-in-powershell>
- <https://social.technet.microsoft.com/Forums/en-US/7c87371d-5a9c-4463-9290-73e339f82b4e/how-do-i-change-the-text-colors-in-a-powershell-command-window?forum=win10itprogeneral>
- https://docs.microsoft.com/en-us/powershell/module/microsoft.powershell.core/about/about_profiles?view=powershell-7.2

How to change text color in Windows Powershell (Version 7)

NOTES: These steps are verified to run only on PowerShell version 7. (They also are verified NOT to run on Powershell version 5.1!)

If your Powershell version is 7 or later, Powershell displays automatically its version at the top of the terminal when you open it.

To make changes documented here, you MUST run Powershell with Administrator privileges! If you do not know how to do that, then use the internet to find a tutorial.

This document shows the PowerShell command prompt as **PS>**. DO NOT type this text to enter a command.

1. Verify your version of Powershell. Open Powershell and enter the following text at the command prompt:

```
PS> $PSVersionTable
```

2. If the version number is below 7, download and install the version 7 msi (microsoft install) file from <https://docs.microsoft.com/en-us/powershell/scripting/install/installing-powershell-on-windows?view=powershell-7.2#msi>
3. Open Windows Powershell.
 - a. In the *Start* menu, scroll down to folder *Powershell* and click to open.
 - b. Right-click icon *Powershell 7*, then select *Run as Administrator* from the popup menu.
4. Right click the title bar, then select *Properties*
5. Click tab *Font*, and select font size and name as desired.
6. Click tab *Terminal*.
 - a. In block *Terminal Colors*, check boxes for *Use Separate Foreground* and *Use Separate Background*.

- b. Enter RGB values (0 to 255) in *Use Separate Foreground* for text color.
 - c. Enter RGB values (0 to 255) in *Use Separate Background* for overall screen color.
7. Test whether or not the color of the first word can be changed using the following command:

```
PS> Set-PSReadLineOption -Colors @{ Command = 'Red' }
```

After entering the command, enter some text at the command prompt to determine if the command took effect on your entered text.

NOTE: A list of acceptable colors is located at the end of this document.

8. If step 7 works, enter the following text at the command prompt to execute another test for changing text color. (Using cut-and-paste works best.) Replace *Blue* with any color you choose. Just be sure not to make your text the same color as the background! **After highlighting the text (for cut-and-paste), hold the Shift key and left-arrow once to exclude the hidden line-return character at the end of the last line.**

```
PS> Set-PSReadLineOption -Colors @{
  "ContinuationPrompt" = [ConsoleColor]:: Blue
  "Emphasis"           = [ConsoleColor]:: Blue
  "Error"              = [ConsoleColor]:: Blue
  "Selection"         = [ConsoleColor]:: Blue
  "Default"           = [ConsoleColor]:: Blue
  "Comment"           = [ConsoleColor]:: Blue
  "Keyword"           = [ConsoleColor]:: Blue
  "String"            = [ConsoleColor]:: Blue
  "Operator"          = [ConsoleColor]:: Blue
  "Variable"          = [ConsoleColor]:: Blue
  "Command"           = [ConsoleColor]:: Blue
  "Parameter"        = [ConsoleColor]:: Blue
  "Type"              = [ConsoleColor]:: Blue
  "Number"            = [ConsoleColor]:: Blue
  "Member"           = [ConsoleColor]:: Blue }
```

9. Your individual settings are kept in a file called profile, but it may not have been created yet. To determine whether or not a profile exists for you, enter each of the following commands at the command line, one after the other:

```
PS> Test-Path -Path $PROFILE
PS> Test-Path -Path $PROFILE.CurrentUserCurrentHost
PS> Test-Path -Path $PROFILE.CurrentUserAllHosts
PS> Test-Path -Path $PROFILE.AllUsersCurrentHost
PS> Test-Path -Path $PROFILE.AllUsersAllHosts
```

Each command entry yields a True or False response. If all tests are false, you must create a profile.

10. Create a profile (safe mode). Enter the following text at the command prompt:

```
PS> if (-not (Test-Path -Path $profile.AllUsersAllHosts)) {New-Item  
-ItemType File -Path $profile.AllUsersAllHosts -Force}
```

NOTES: The command above checks for the presence of a profile. It creates a profile ONLY if one does not exist, yet.
The best way to enter the command above is to use copy-and-paste to ensure all characters are included and that none (such as a line break) are added. After copying, paste the command into Powershell by right-clicking the mouse. This adds the text to the next command line.

11. Powershell may or may not create a profile, but it will indicate which one occurs as follows:

- a. **When Powershell creates the profile**, it displays the following text:

```
Directory: C:\Program Files\PowerShell\7  
  
Mode                LastWriteTime         Length Name  
----                -  
-a-----          1/18/2022   9:39 PM           0 profile.ps1
```

NOTE: The directory displayed in the text is the location of the new profile with filename profile.ps1.

- b. **When Powershell DOES NOT create a profile** (one exists already), it simply displays the command prompt without seeming to have done anything.

12. Using Windows Explorer, browse to the location where profile.ps1 is stored. In this example, the complete filepath is:

```
C:\Program Files\PowerShell\7\profile.ps1
```

NOTE: Open file profile.ps1 with an ASCII text editor such as Notepad. DO NOT use a word processor (such as MS Word) because it will introduce hidden control characters that prevent the profile commands from working correctly.

9. Right-click on the file, and select *Open with...* from the popup menu.
10. At the application selection window, select *Notepad*, then click *OK*. Note that the file is empty when it first opens. This is GOOD!
11. It's a good idea to add code at the beginning of the profile to display unique text when the terminal first opens. This confirms that PowerShell read the profile successfully.

Example: Write-Output "New profile in effect."

12. Copy and paste the text from step 8 into Notepad, and change the colors to your liking using the colors listed at the end of this document.

13. If the folder that contains your profile is a Windows system folder, Windows WILL NOT let you save the file directly back into the same directory from where you opened it! If this is the case, here are the work-around steps:
 - a. Save the Notepad file to your Windows desktop by entering "profile.ps1" (INCLUDING the quote marks!) in field for *File name*:. If you do not enclose the filename in quotes, Notepad will save the file with a .txt extension.
 - b. After closing Notepad, copy and paste profile.ps1 into the directory it came from originally. Windows prompts you to replace/skip/compare files. Choose *Replace the file in the destination*.
 - c. Next, Windows prompts you to provide administrator permission to copy the file to this folder. Click the *Continue* button. (It should have an admin shield on the button.)
14. Now, open a PowerShell terminal, and verify that your profile has taken effect.
15. If you wish to run Powershell later without loading the profile, do the following:
 - a. Press Window + r simultaneously to bring up the *Run* dialog box.
 - b. In field *Open*:, enter the following text (case sensitive):

```
PS> PowerShell -NoProfile
```

then click the *OK* button.

END OF PROCEDURE *****

Acceptable Text Colors to Use in Windows PowerShell version 7

The colors in Column 1 should be used when the background is a light color. Thoses in Column 2 should be used when the background is a dark color.

Col 1	Col 2	(Notes)
Black	White	
DarkGray	Gray	(Gray is a light gray—barely readable against a white bkgnd)
DarkBlue	Blue	(DarkBlue is indistinguishable from Black)
DarkGreen	Green	
DarkCyan	Cyan	
DarkMagenta	Magenta	(DarkMagenta shows as purple)
DarkYellow	Yellow	(DarkYellow shows as brown)
DarkRed	Red	(DarkRed is barely distinguishable from DarkMagenta) (Red is still fairly visible against a light/white background)