PowerShell Scripting Homework 1:  
What’s my favorite color?

# What is my favorite color

Create a PowerShell script that asks the user what my favorite color is? This is a game where the user guesses the script’s favorite color. The game will keep track of game stats and allow for repeated play.

# Game play/requirements are as follows:

1. When the round starts select a color at random and ask the user to guess the selected color.
2. Read the guess and process
   1. If they guess incorrectly, inform them that the color they selected is wrong and ask them to guess again.
   2. If the user enters a color that is not a valid color inform them to that end and let them guess again.
3. Provide a mechanism to list the valid colors to the user (either on demand or as part of game play).
4. When a user guesses incorrectly provide a message and let them guess again.
5. When a user guesses correctly let them know that they got it correct and end the round.
6. For both correct and incorrect messages, include the color name in the message displayed in the color. E.g. “Correct, Blue is my favorite color.”
7. Keep a record of the colors guessed and provide a mechanism to show the user what wrong colors they have guessed (either on demand, or as part of game play).
8. Provide a mechanism to give the user a hint, the hint will display the first letter of the correct color.
9. Provide a mechanism for the user to quit a round.
10. Keep a record of the guess attempts and let the user know how many guesses it took to guess the correct answer.
11. Keep track of how long it takes the user to guess the correct answer and let them know how long it took to play the round.
12. After the round is over give the user an option to try again.
13. Keep a record of how long it took for each game won, when the user quits playing let the user know how many games were played, how long each game took and what the average time to win is.

# Requirements:

* Create a script name ***<yourname>***\_**color.ps1**  where *<yourname>* is your last name and first initial of your first name. E.g. I would name my script LindstromC\_color.ps1
* Include the following author comment block

#===================================================

# Program Name : Color

# Author: <your name>

# I <yourname> wrote this script as original work completed by me.

# Special Feature: <describe your special feature here>

#===================================================

* Add a special feature to your game. Be creative.

# Hints:

You can get a list of the console color values with the command:

$SystemColors=[System.Enum]::getvalues([System.ConsoleColor]) *#Returns an array of all the possible ConsoleColor Values*

$color=[System.ConsoleColor]'Red' *#Creates a ConsoleColor from a string*

[string]$color *#Returns the name of the enumeration*

[int]$color *#Returns the value of the enumeration*

# Deliverable:

Upload your script to I-Learn

# Grading Rubric:

|  |  |
| --- | --- |
| Element | Points |
| Select random color from color list | 2 |
| Guess evaluation and feedback | 4 |
| Colored colors in output | 2 |
| Color Lists (full and incorrect) | 2 |
| Hint and Give Up | 2 |
| Round time and guess count | 2 |
| Multiple round support | 2 |
| Round stats | 2 |
| Special Feature | 2 |

#===================================================

# Program Name : Color

# Author: Dalton Cole

# I, Dalton Cole, wrote this script as original work completed by me.

# Special Feature: <describe your special feature here>

#===================================================

# Hashtables for all the console colors

$Black=@{color = "Black"; guessed = $false}

$DarkBlue=@{color = "DarkBlue"; guessed = $false}

$DarkGreen=@{color = "DarkGreen"; guessed = $false}

$DarkCyan=@{color = "DarkCyan"; guessed = $false}

$DarkRed=@{color = "DarkRed"; guessed = $false}

$DarkMagenta=@{color = "DarkMagenta"; guessed = $false}

$DarkYellow=@{color = "DarkYellow"; guessed = $false}

$Gray=@{color = "Gray"; guessed = $false}

$DarkGray=@{color = "DarkGray"; guessed = $false}

$Blue=@{color = "Blue"; guessed = $false}

$Green=@{color = "Green"; guessed = $false}

$Cyan=@{color = "Cyan"; guessed = $false}

$Red=@{color = "Red"; guessed = $false}

$Magenta=@{color = "Magenta"; guessed = $false}

$Yellow=@{color = "Yellow"; guessed = $false}

$White=@{color = "White"; guessed = $false}

$list = $Black,$DarkBlue,$DarkGreen,$DarkCyan,$DarkRed,$DarkMagenta,$DarkYellow,$Gray,$DarkGray,$Blue,$Green,$Cyan,$Red,$Magenta,$Yellow,$White