Power of 10

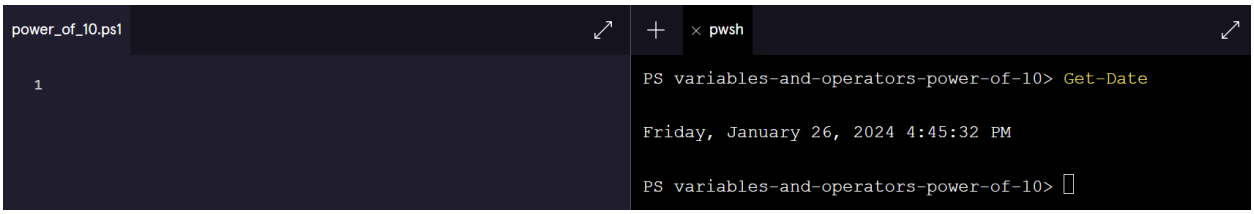
By Max Santomauro

- **Note**: This project was done with the scripting environment and PowerShell terminal available through Codecademy (codecademy.com).

Project Description

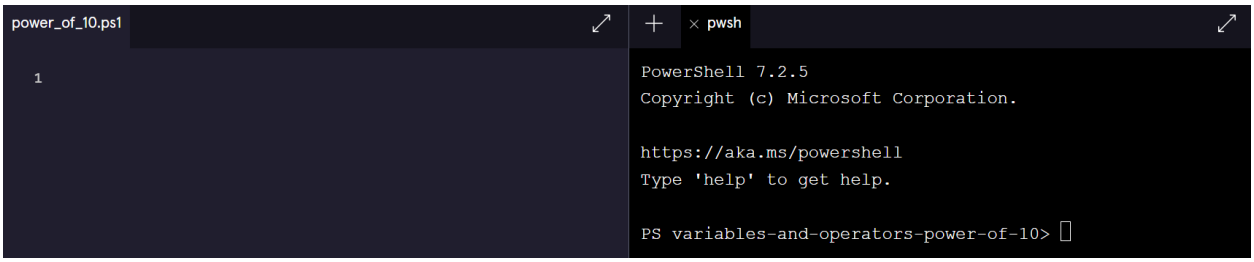
I created a script in which the script takes any number and always outputs the value **10** in the PowerShell terminal.

Project Start Timestamp



Environment Setup

This is the setup of the environment within Codecademy. It includes a script called **power_of_10.ps1** and the latest terminal version of **PowerShell**:

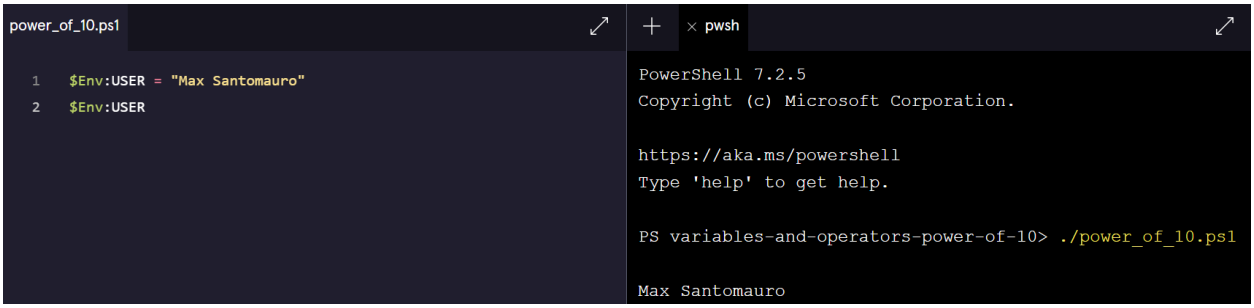


Environment Variable Setup

1. First thing I did is create an environment variable that gets my name. To do this, I wrote this in the script:

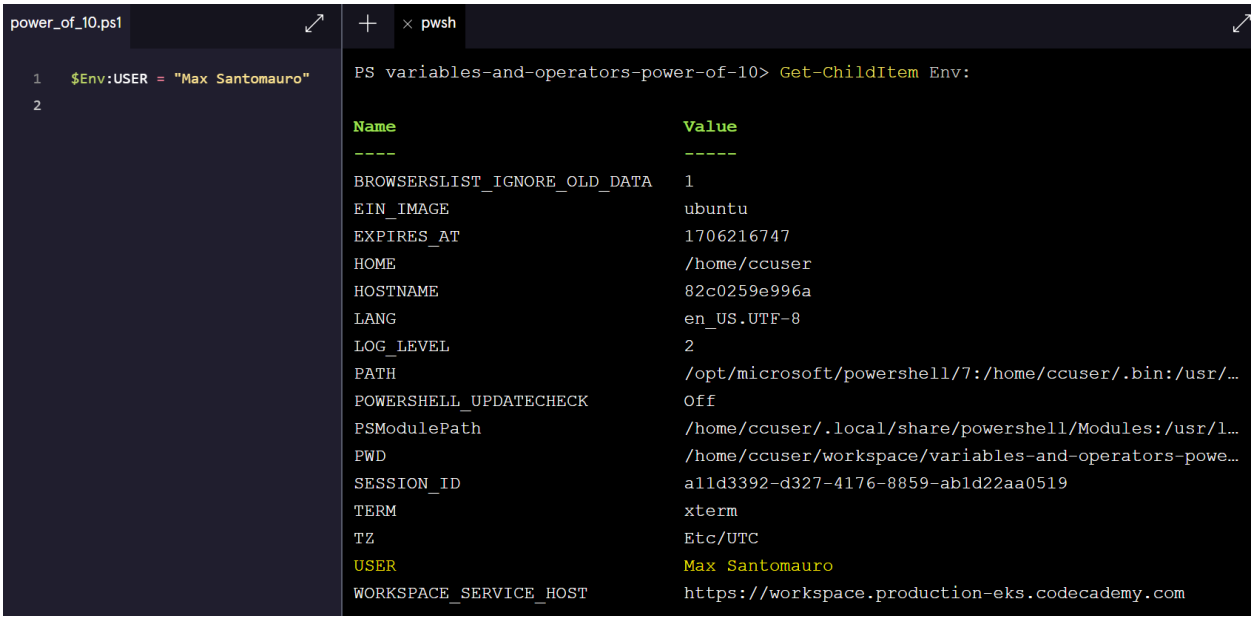
2. This environment variable can be verified by either printing the value of the **USER** in the script with **$Env:USER** and calling the script in the terminal or listing all the environment variables in the PowerShell terminal with command **Get-Childitem Env:USER**. Which is shown below:

Created within script and script outputted in terminal



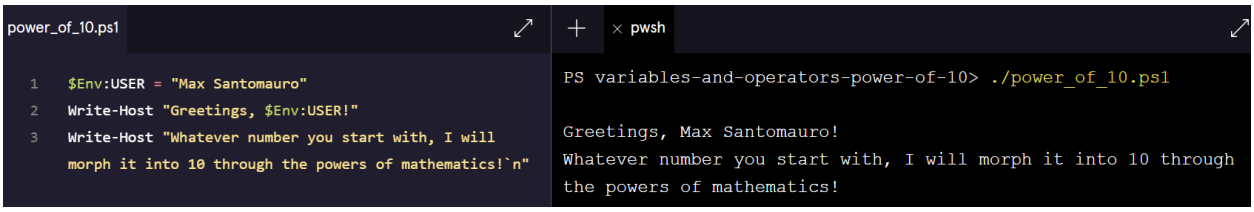
Listing all environment variables in PowerShell

(USER highlighted in yellow)



Greetings

3. I created a couple of **Write-Host** cmdlets, which includes my USER name in the first one, within the script and called the script in the terminal to confirm the initial output.



User's Input

4. In the script, I used the **Read-Host** command along with the **-Prompt** function to get the user to input a number and saved it to a constrained variable called **original_number** with an **Int** type.
    a. **Note: Int** refers to integer only. So if I type anything other than an integer, there will be an error when called in the PowerShell prompt.

```
5   [Int]$original_number = Read-Host -Prompt "Type a number, any
    number"
```

5. To manipulate the user's value without changing the **original_number variable**, I assigned the variable to a new variable called **final_number** and revised the new variable by adding 5.

```
6   $final_number = $original_number
7   $final_number += 5
```

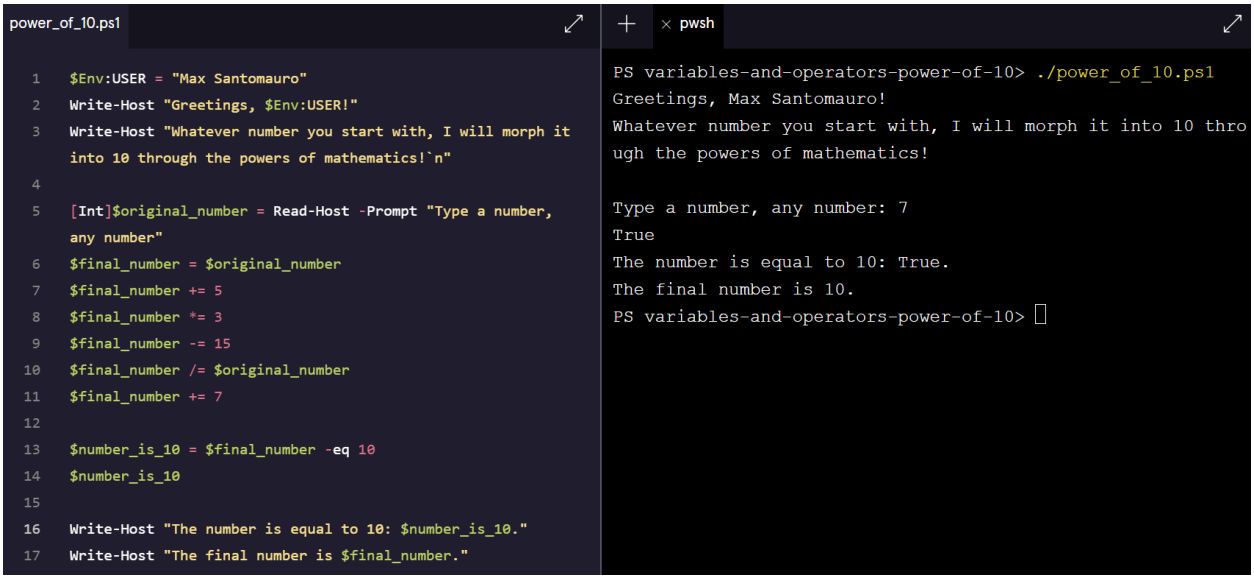
6. I then did other operations to manipulate the **final_number** variable.

```
6   $final_number = $original_number
7   $final_number += 5
8   $final_number *= 3
9   $final_number -= 15
10  $final_number /= $original_number
11  $final_number += 7
```

7. I then had to determine if the **final_number** is equal to **10** by using the equality comparison operator, Which is **-eq** and saved it to a variable called **number_is_10**.

```
13    $number_is_10 = $final_number -eq 10
14    $number_is_10
```

8. Lastly, I printed the results using the **Write-Host** command in the script (lines 16 & 17) and ran the script in the PowerShell terminal. I picked the number 7 as a test output in the terminal.



Project End Timestamp

```
The number is equal to 10: True.
The final number is 10.
PS variables-and-operators-power-of-10> Get-Date

Friday, January 26, 2024 6:04:40 PM

PS variables-and-operators-power-of-10>
```