**Creating a Python Program**

1. Comments:
   1. Comments are important for documenting your code so others understand the purpose of your script and subsections it contains.
   2. Comments in Python are preceded by a #
   3. Style guides indicate a space should follow the #
   4. Example:

# Author: Robert Ellison  
# A script to ….  
# Last Modified: ….

1. Print Statements
   1. The print command is all lowercase.
   2. The + operator can be used for string concatenation.
   3. Example

print('Hello, World!')

print ('Hello ' + name)

1. Functions
   1. **input()**
      1. The input function can be used to prompt for input from a user.
      2. A string enclosed in quotes can be used inside the parenthesis to prompt the user for input.
         1. Example:  
            input('Enter your name: ')

myName = input('Enter your name: ')

* + 1. The input command automatically assigns all variables as string data types. This is important if you will be performing calculations.
       1. This can be circumvented by using the functions **int()** – for integer data types -- or **float() –** for decimal data types**.**
          1. Example:

unitCount = int(input('Enter the number of items Purchased: '))

* + - 1. Similarly, the **str()** function can be used to force a value to a string data type.
  1. **len()**
     1. The len() function counts the number of characters in a string.

1. Now let's create a Python Script.
2. Ensure you have activated your Python Virtual Machine
3. Navigate to the Documents subdirectory of your user profile.
4. Open a file called program1.py in vim.
5. Switch to Insert mode.
6. Enter the following Python Code:

# Author: Your Name

# This program says hello and asks for the users name

print('Hello, World!')

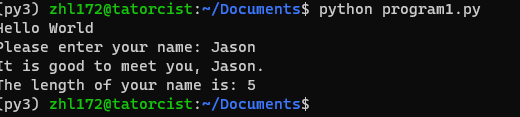
yourName = input('Please enter your name: ') # ask for their name

print('It is good to meet you, ' + yourName + '.')

# Now count the number of characters in the yourName variable

# and convert result to string so it can be concatenated to another string

print('The length of your name is: ' + str(len(yourName)))

1. Save and Execute your script.
   1. Insert a screenshot of the output.
   2. 
2. Close the file.
3. Open a file in vim called program2.py and switch to Insert Mode.
4. Write a Python code that includes the following:
   1. A comment with your name as the author
   2. Prompt for the number of items purchased and store as an integer data type in a variable called quantity.
   3. Prompt for the cost of the item and store as a float in a variable called cost.
   4. Output "Your total is" followed by the computed output of quantity multiplied by cost.
   5. Save and execute your program.
   6. Insert a screenshot of your code and the output.
   7. 