MEET Y1 - Module 3 - Lab 1

Intro to **IDLE3** - Hello World!

In this lab, you will learn how to print text (like "Hello World!") using **Python** in **IDLE3** and add comments using '**#**'
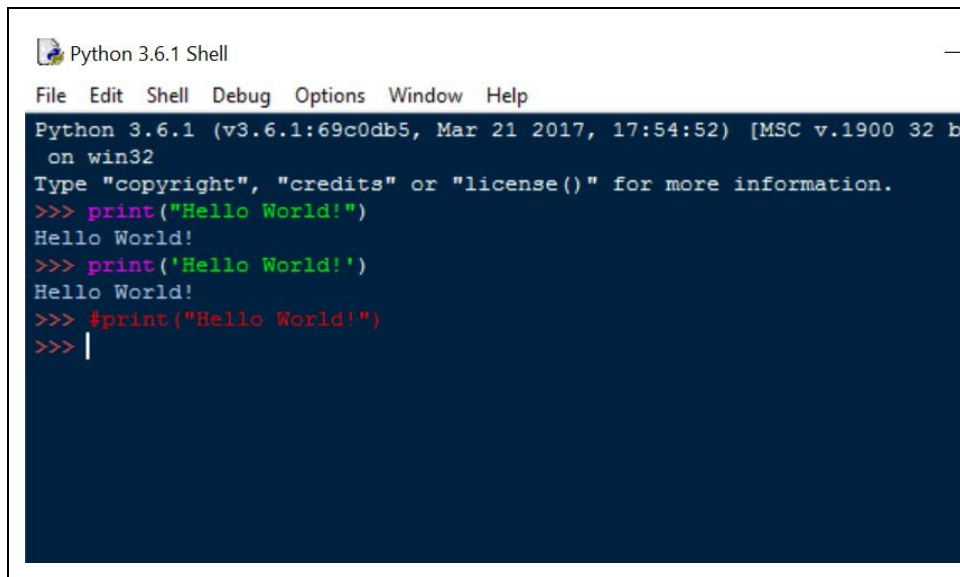
Linux command used in this lab:

- `idle3 &` -- opens up **IDLE3** for programming in **Python**

Python commands used in this lab:

- `print()` -- prints outs the text included in the parentheses

- **#** -- this symbol is used before a comment. **Python** doesn't execute anything after it

Follow these instructions:

0.   Open a **Linux** terminal by double clicking on this icon:

1.   Type `startlab`. Enter your username and module *3*!
      Follow the directions to change to the new directory.

2.   Type `idle3 &` to open **IDLE3**. A window should pop up. (See below)

3.   In the new window, type `print("Hello World!")`
      What do you see?

4.   Now type `print('Hello World!')`
      Note: Use single quotations 'Hello World!', instead of double
      quotations "Hello World!". Did anything change?

5.   Say Hello! to your partner by including his/her name. Show it to them!

6.   Now type **#** `print("Hello World!")`
      What happens? You have just made a **comment**. **Python** does not
      read anything after the # symbol (but people looking at your code do).

7. Use translate.google.com to translate "Hello World" into other languages,
   filling out the table below. Include your own native language and add a few more! (You can even listen to the pronunciation on google.)

Language	Translation
English	Hello world
Greek	
Portuguese	
Czech	
Korean	
Chinese	
Hindi	
Swahili	

8. In **IDLE3**, go to *File → New File* and then *File → Save As…*

   Name your file `HelloWorld.py`.

   Using the table above, type the following on a new line for each language:

   ```
   print("(Translation) is how you say Hello
   World in (Language).")
   ```
   like...
   ```
   print("Hello World is how you say Hello
   World in English.")
   ```

   Hit the keyboard key *F5* to run your first **Python** script! And don't

forget to SAVE your file!

Bonus problems:

9. Start a new program named `RobertFrost.py`. Copy the text below EXACTLY as written.

```
twoRoads = "Two roads diverged in a wood, and I-"
roadTaken = "I took the one most traveled by,"
less = "I took the one less traveled by,"
theDifference = "And that has made all the difference."

roadTaken = less

print(twoRoads)
print(roadTaken)
print(theDifference)
```

Try running your code. It should work. If you get an error, fix it. Once you get it working, we're going to play with comments!

First, place a comment sign (#) in front of the line that begins with `roadTaken = "I took..."` The line should now look like this:
`#roadTaken = "I took the one most traveled by,"`

Save the program and run the program again. Did anything change in the output? Why or why not?

Now, **remove the comment sign!**

Add a comment sign in front of the line that says `roadTaken = less`
The line should now look like this: `#roadTaken = less`

Save and run the program. Did anything change? Look closely!

10. Open and save a new file called `specialCharacters.py`.
    Use the following table to test out printing special characters:
    (Remember to press *F5* to run the code)

You want...	So type...	Example
Double-quotations " "	\"	`print(" \"Hi!\" ")`
Single-quotations ' '	\'	`print(" \'Hello!\' ")`
Backslash \	\\	`print(" \\MEET\\Module1\\ ")`
new line	\n	`print("first \n second")`
tab	\t	`print("no tab \t tab")`

10. Use your new knowledge of `\"` , `\'` , `\\` , `\n`, and `\t` to **print out** the following dialogue:

```
Instructor Alex asks, "What are you learning today?"

    The students reply, 'We are learning how to print!'

We can type print("\\Day1\\") to print out \Day1\.
```

11. Save your file and type `bash endlab` in the **Linux** terminal to finish!