

## Lab 2.2 First programs

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### Do this lab in VSCode:

Open VSCode,

In VSCode open the folder you made in week 1 that links to your repository.

1. Create a file called helloWorld.py and write a program that prints out "Hello World", you should put comments above the command to say what the file does, I will not keep reminding you to do this

```
# helloWorld.py
# This program just prints out hello World
# author: Andrew Beatty

print ("Hello World!")
```

2. Save the file and run this program on the command line (either by CMDER or VSCODE)

```
$python helloWorld.py
```

3. Create a directory called week02
4. In week02 create a file called hello.py that just says hello

```
print("Hello")
```

5. Save the file (CTRL+S) and run it

```
$cd week02
$python hello.py
```

6. Change the code to say hello your name

```
print("Hello Andrew")
```

7. Don't save it and see that when you run it, the output is still hello
8. Save it and see that the output has changed.
9. Make a mistake with the syntax and try to run it.

```
print("Hello Andrew"
```

10. Write a program called multiply.py that outputs what  $111 * 555$  is

```
answer = 111 * 555
```

11. Why does this print out nothing, when run? Fix it!!

Don't type  
the \$  
I put it  
here to let  
you know  
that this is  
a prompt

## Inputs

12. Create a new file called hello2.py that reads in a person's name and prints out hello that persons name

```
name = input("Enter your name:")  
print('Hello ' + name)
```

What would happen if this space was not inside the "

13. Modify to say nice to meet you after saying hello

\n is  
newline

```
name = input("Enter your name:")  
print('Hello ' + name + '\nNice to meet you')  
# or you could do this with format  
print('Hello {}'.format(name))
```

14. Create a file called addOne.py, that reading on a number and prints out one more than that number.

```
name = input("Enter your name:")  
print('Hello ' + name + '\nNice to meet you')  
# or you could do this with format  
print('Hello {}'.format(name))
```

## Push your files to GitHub

15. Add you files to your repository, commit them and push them to getHub

```
$git add .  
$git commit -m "week 02"  
$git push
```

You will have to type this code int the command line.  
If you try to copy and paste the command line will not like the Microsoft "

16. Check that your code is on GitHub

**Extra: (Questions that I don't give the solution for)**

17. Write a program (nameAndAge.py) that reads in a name and age and outputs the following (make sure you get the spaces right):

```
Hello Andrew, your age is 21.
```

18. Modify the program so that it has a tab at the end of the name, (\t)

```
Hello Andrew,    your age is 21.
```

19. Write a program that outputs 21 -4

```
17
```

20. Write a program that outputs if 2 == 3

```
False
```

21. Do some of your own messing around, look at [Python String Formatting \(w3schools.com\)](https://www.w3schools.com/python/python_string_formatting.asp)