

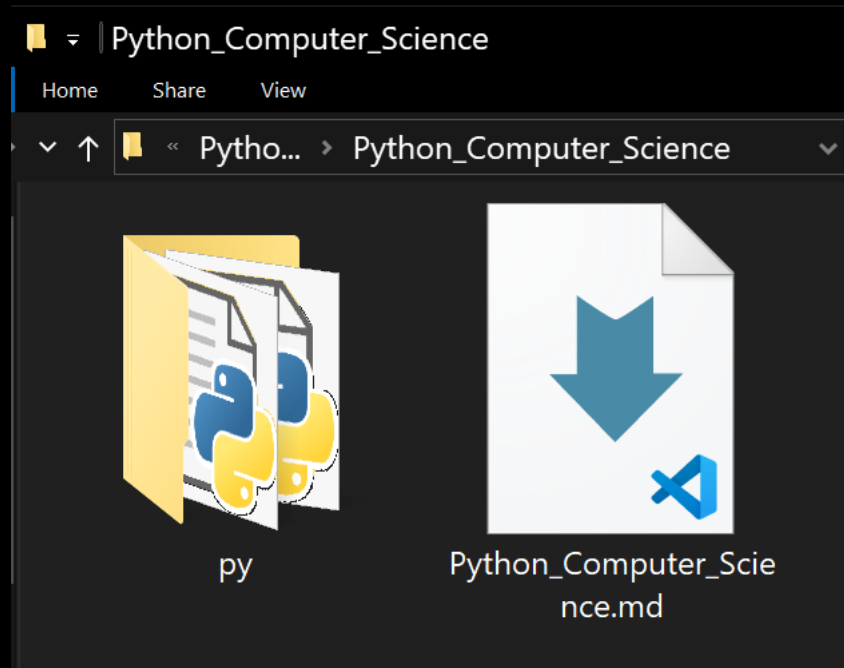
# Python Computer Science

by

**Christopher Andrew Topalian**

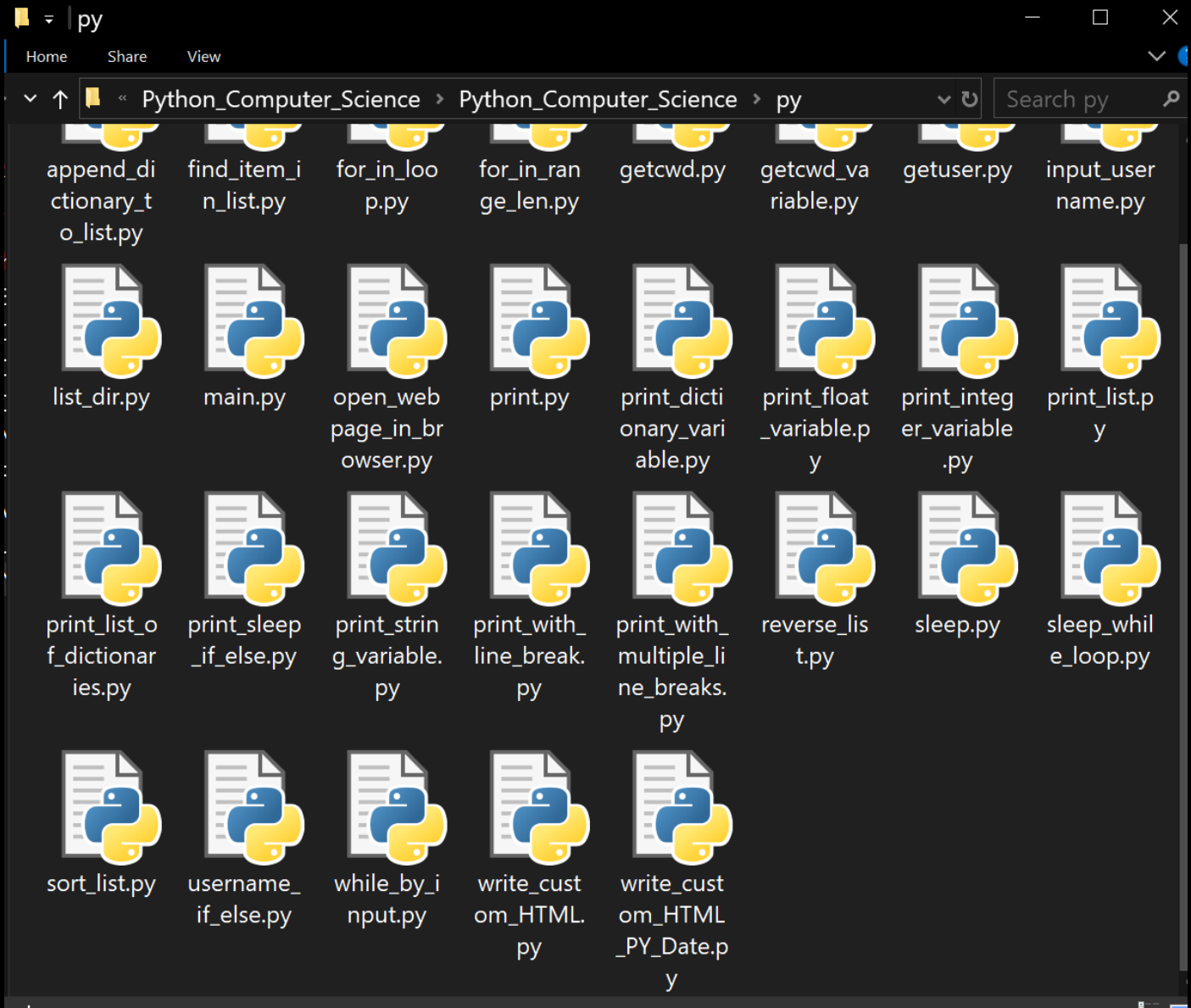
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# Dedicated to God the Father



**Here is our project folder.**

**We have our `Python_Computer_Science.md` file, that is our Table of Contents and it references scripts that are located in the folder named `py`**



Here is our py folder of Python scripts.

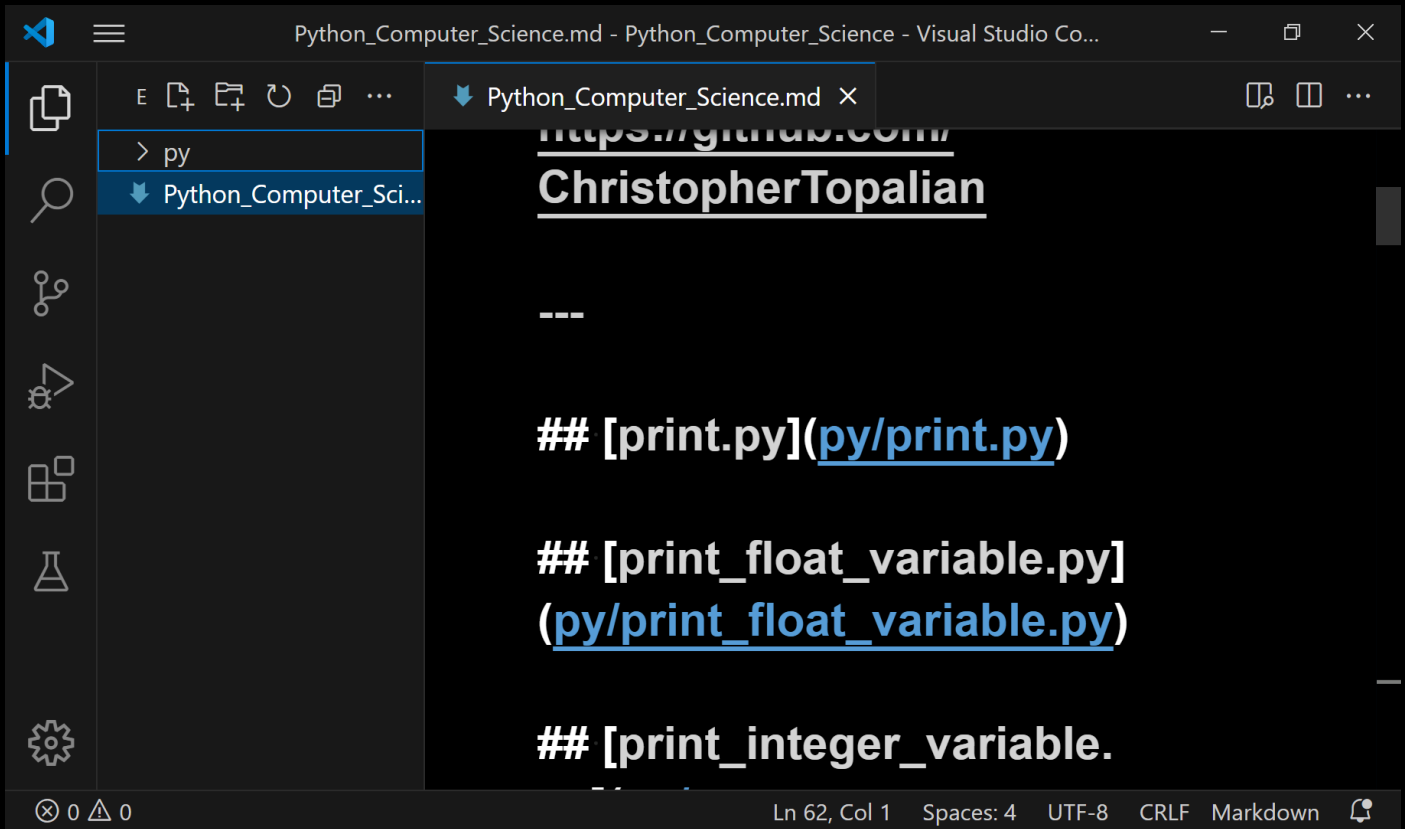
**Our Markdown file is located outside of the py folder.**

**We can open the Python\_Computer\_Science.md file in VSCode and use the Preview feature.**

**The Python\_Computer\_Science.md file is a Table of Contents that is clickable, but of course we must have the Python scripts in the py folder for it to reference correctly.**

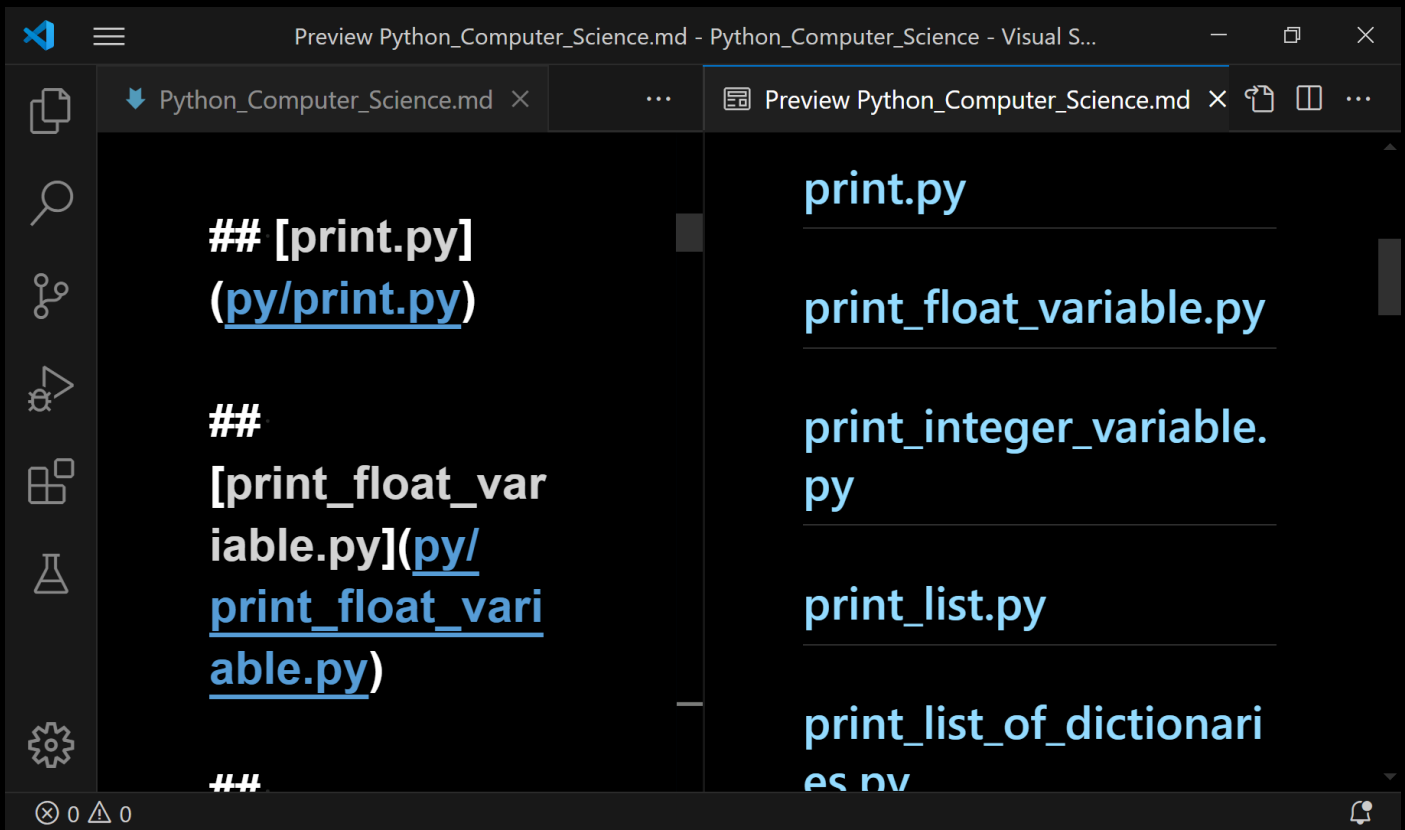
**Important to note is that this also works on github! We can use the same reference structure so that people can have an easy time navigating our scripting project.**

**Happy Scripting :-)**



**Hold Control + Left Click on any link to open a script**

**OR Left click on the Preview Icon at the top right of the VSCode Window to enter Preview mode.**



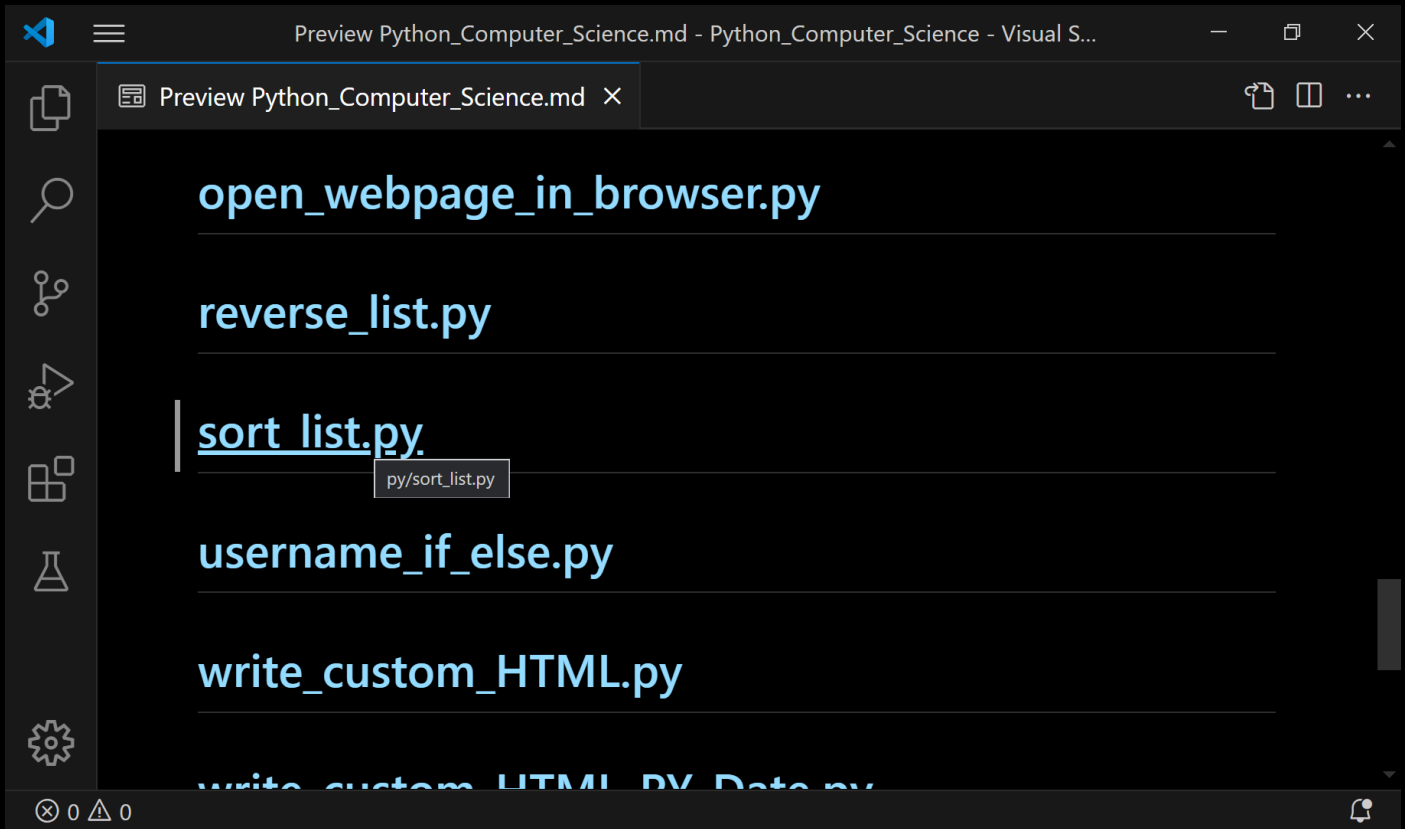
This shows our .md editable file on the left and the preview of the rendered markdown file on the right.

The right side can be left clicked on without having to hold down control.



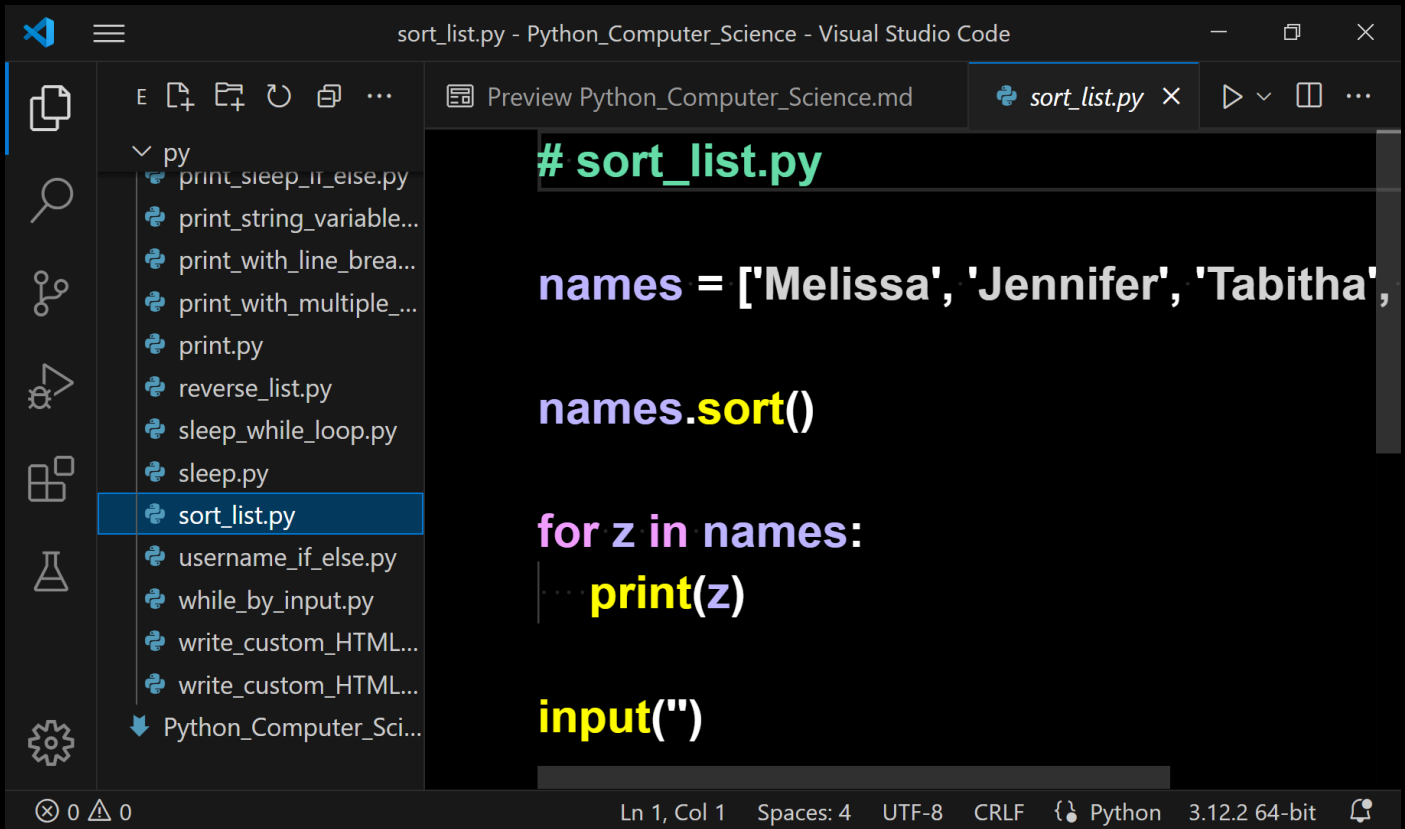
**Control + Shift + V**  
**Full Preview of our Markdown file for easy navigation in our VSCode scripting project.**





**Let's say that we Left Click on the file named `sort_list.py`**

**Result is shown on the next page.**

A screenshot of the Visual Studio Code editor interface. The title bar at the top reads "sort\_list.py - Python\_Computer\_Science - Visual Studio Code". The interface is divided into three main sections. On the left is the Explorer sidebar, which shows a file tree under a folder named "py". The files listed are: "print\_sleep\_it\_eise.py", "print\_string\_variable...", "print\_with\_line\_brea...", "print\_with\_multiple...", "print.py", "reverse\_list.py", "sleep\_while\_loop.py", "sleep.py", "sort\_list.py" (which is highlighted with a blue background), "username\_if\_else.py", "while\_by\_input.py", "write\_custom\_HTML...", "write\_custom\_HTML...", and "Python\_Computer\_Sci...". The top section contains the editor tabs, with "sort\_list.py" being the active tab. The main editor area displays the following Python code:

```
# sort_list.py

names = ['Melissa', 'Jennifer', 'Tabitha',

names.sort()

for z in names:
    print(z)

input("")
```

The bottom status bar shows "Ln 1, Col 1", "Spaces: 4", "UTF-8", "CRLF", "Python", and "3.12.2 64-bit".

This opens our script in another tab and shows us which script in the folder is being worked on by highlighting the name of the script in the file explorer on the left side. This makes working on big projects very easy, because we are very organized.

**<!-- Python\_Computer\_Science.md -->**

**### Dedicated to God the Father**

**## Python\_Computer\_Science**

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**<https://github.com/ChristopherTopalian>**

**---**

**## [print.py](py/print.py)**

**##**

**[print\_float\_variable.py](py/print\_float\_variable.py)**

**##**

**[print\_integer\_variable.py](py/print\_integer\_variable.py)**

**## [print\_list.py](py/print\_list.py)**

**##**

**[print\_list\_of\_dictionaries.py](py/print\_list\_of\_dictionaries.py)**

**##**

**[print\_dictionary\_variable.py](py/print\_dictionary\_variable.py)**

**##**

**[print\_string\_variable.py](py/print\_string\_variable.py)**

##

[print\_with\_line\_break.py](py/print\_with\_line\_break.py)

##

[print\_with\_multiple\_line\_breaks.py](py/print\_with\_multiple\_line\_breaks.py)

## [sleep.py](py/sleep.py)

##

[sleep\_while\_loop.py](py/sleep\_while\_loop.py)

## [while\_by\_input.py](py/while\_by\_input.py)

**##**

**[print\_sleep\_if\_else.py](py/print\_sleep\_if\_else.py)**

**##**

**[append\_dictionary\_to\_list](py/append\_dictionary\_to\_list.py)**

**##**

**[find\_item\_in\_list.py](py/find\_item\_in\_list.py)**

**## [for\_in\_loop.py](py/for\_in\_loop.py)**

**##**

**[for\_in\_range\_len.py](py/for\_in\_range\_len.py)**

**## [getcwd.py](py/getcwd.py)**

**## [getcwd\_variable](py/getcwd\_variable.py)**

**## [getuser.py](py/getuser.py)**

**##**

**[input\_username.py](py/input\_username.py)**

**## [list\_dir.py](py/list\_dir.py)**

**##**

**[open\_webpage\_in\_browser.py](py/open\_webpage\_in\_browser.py)**

**## [reverse\_list.py](py/reverse\_list.py)**

**## [sort\_list.py](py/sort\_list.py)**

**##**

**[username\_if\_else.py](py/username\_if\_else.py)**

**##**

**[write\_custom\_HTML.py](py/write\_custom\_HTML.py)**

**##**

**[write\_custom\_HTML\_PY\_Date.py](py/write\_custom\_HTML\_PY\_Date.py)**



# # append\_dictionary\_to\_list.py

```
people = []
```

```
jane = {  
    'name': 'Jane',  
    'score': 98  
}
```

```
people.append(jane)
```

```
print(people)  
input("")
```

```
# find_item_in_list.py
```

```
ourNumbers = [  
    4, 875, 23, 543, 12  
]
```

```
numberToFind = 875
```

```
if (numberToFind in ourNumbers):  
    print(f'Yes, {numberToFind} is there')  
else:  
    print(f'No, {numberToFind} is NOT there')  
  
input("")
```

```
# for_in_loop.py
```

```
ourNumbers = [  
    4, 875, 23, 543, 12  
]
```

```
for z in ourNumbers:  
    print(z)
```

```
input("")
```

## # for\_in\_range\_len.py

```
ourNumbers = [  
    4, 875, 23, 543, 12  
]  
  
for z in range(len(ourNumbers)):  
    print(ourNumbers[z])  
  
input("")
```

```
# getcwd.py
```

```
import os
```

```
print(os.getcwd())  
input("")
```

```
# getcwd_variable.py
```

```
import os
```

```
theCwd = os.getcwd()
```

```
print(theCwd)
```

```
input("")
```

```
# getuser.py
```

```
import getpass
```

```
print(getpass.getuser())  
input("")
```

```
# input_username.py
```

```
userName = input("Enter Username: ")
```

```
print("Username is: " + userName)
```

```
input("")
```



```
# list_dir.py
```

```
import os
```

```
print(os.listdir())  
input("")
```

```
# open_webpage_in_browser.py
```

```
import webbrowser
```

```
webbrowser.open('https://github.com/  
ChristopherTopalian')
```

```
# print.py
```

```
print('Hi Everyone')  
input("")
```

## # print\_dictionary\_variable.py

```
jane = {  
    'name': 'Jane',  
    'score': 98  
}
```

```
print(jane)  
input("")
```

```
# print_float_variable.py
```

```
numberOfPeople = 20.82
```

```
print(numberOfPeople)  
input("")
```

```
# print_integer_variable.py
```

```
numberOfPeople = 20
```

```
print(numberOfPeople)  
input("")
```

```
# print_list.py
```

```
people = [  
    'Jane',  
    'Tabitha',  
    'Melissa'  
]
```

```
print(people)  
input("")
```

# # print\_list\_of\_dictionaries.py

```
people = [  
    {  
        'name': 'Jane',  
        'score': 95  
    },  
    {  
        'name': 'Melissa',  
        'score': 98  
    },  
    {  
        'name': 'Tabitha',  
        'score': 93  
    },  
]
```



```
print(people)
input("")
```

```
# print_sleep_if_else.py
```

```
import time
```

```
print('Hi Friend')
```

```
time.sleep(3.0)
```

```
print('Is the sun shining?')
```

```
sunShining = input('y/n\n')
```

```
if (sunShining == 'y'):
```

```
    print('Nice that it is sunny out')
```

```
else:
```

```
    print('The sun will be there soon')
```

```
input("")
```

```
# print_string_variable.py
```

```
numberOfPeople = 'Twenty'
```

```
print(numberOfPeople)
```

```
input("")
```

```
# print_with_line_break.py
```

```
print('Hi Everyone\nHappy Scripting')  
input("")
```

## # print\_with\_multiple\_line\_breaks.py

```
print('Hi Everyone\n\nHappy Scripting')  
input("")
```

```
# reverse_list.py
```

```
names = ['Jane', 'Jennifer', 'Melissa', 'Tabitha']
```

```
names.reverse()
```

```
for z in names:  
    print(z)
```

```
input("")
```

```
# sleep.py
```

```
import time
```

```
time.sleep(4.0)
```

```
print('4 seconds passed')
```

```
input("")
```

```
# sleep_while_loop.py
```

```
import time
```

```
x = 0
```

```
while x != 1:
```

```
    time.sleep(4.0)
```

```
    print('4 seconds passed')
```

```
input("")
```



```
# sort_list.py
```

```
names = ['Melissa', 'Jennifer', 'Tabitha', 'Jane']
```

```
names.sort()
```

```
for z in names:
```

```
    print(z)
```

```
input("")
```

```
# username_if_else.py
```

```
userName = input("Enter Username: ")
```

```
if (userName == 'Christopher'):
```

```
    print('Hi Christopher')
```

```
else:
```

```
print(f'Hi {userName}. Tell Christopher to  
sign in.')
```

```
input("")
```

```
# while_by_input.py
```

```
import time
```

```
x = input('Type 1 and press Enter\n')
```

```
while (x == '1'):  
    time.sleep(4.0)  
    print('4 seconds passed')
```

```
input("")
```

## # write\_custom\_HTML.py

```
ourHTMLContent = """
<html>
<head>
<title> Our HTML Page </title>

<style>

body
{
    padding: 10px;
    background-color: rgb(30, 30, 30);
    font-family: Arial;
    font-size: 20px;
    color: rgb(255, 255, 255);
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div> Hi Everyone </div>
```

```
</body>
```

```
</html>
```

```
.....
```

```
with open('ourNewWebpage.html', 'w') as  
theFile:  
    theFile.write(ourHTMLContent)
```

```
# write_custom_HTML_PY_Date.py
```

```
import datetime as dt
```

```
currentDate = dt.datetime.now().strftime('%Y-%m-%d')
```

```
ourHTMLContent = f"""
```

```
<html>
```

```
<head>
```

```
<title> Our HTML Page </title>
```

```
<style>
```

```
body {{
```

```
    padding: 10px;
```

```
    background-color: rgb(30, 30, 30);
```

```
    font-family: Arial;
```

```
font-size: 20px;  
color: rgb(255, 255, 255);  
}}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div> Current Date: {currentDate} </div>
```

```
<div> Hi Everyone </div>
```

```
</body>
```

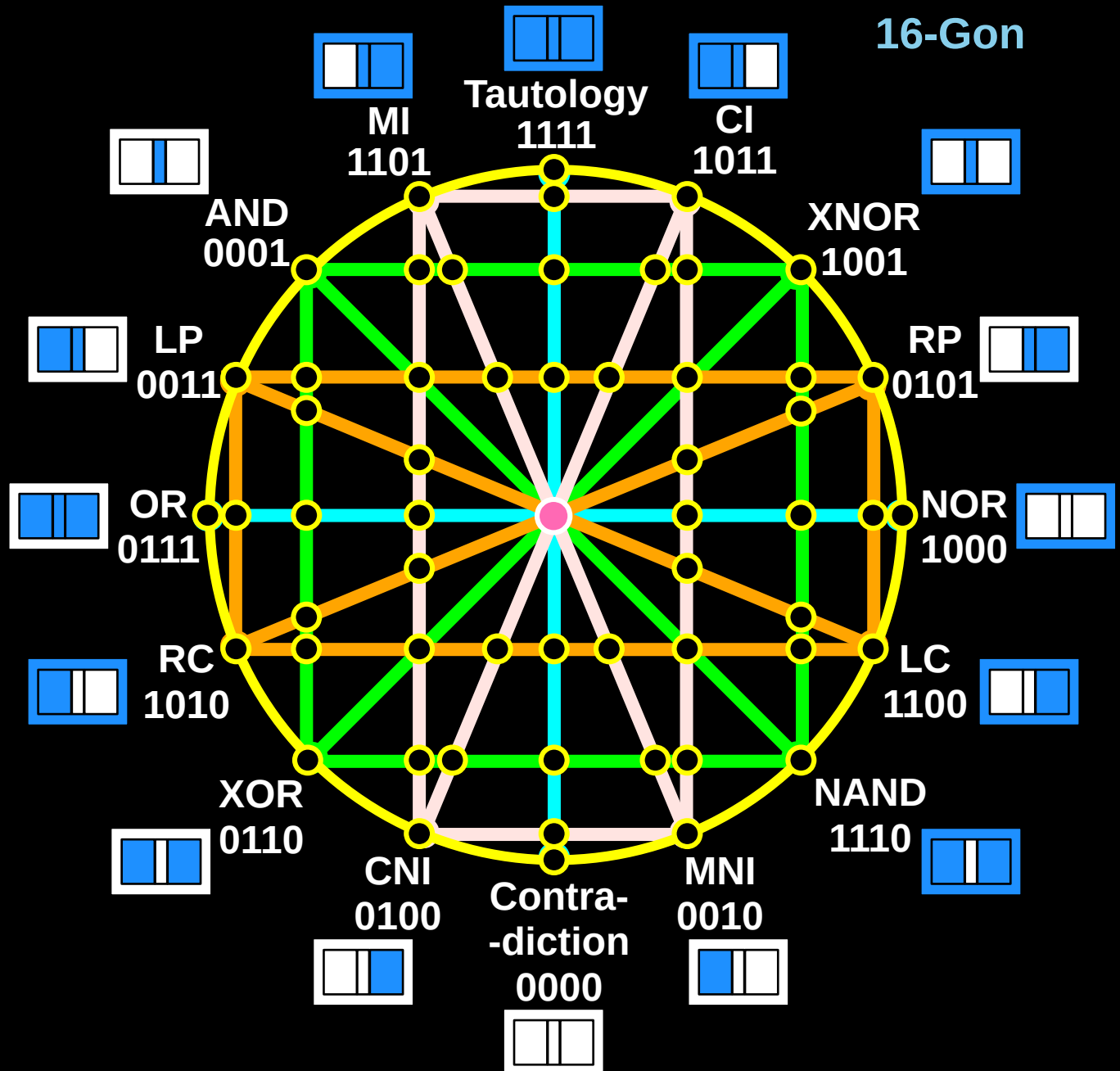
```
</html>
```

\*\*\*\*\*

```
with open('ourNewWebpage.html', 'w') as  
theFile:  
    theFile.write(ourHTMLContent)
```



# True Artificial Intelligence System



# For More Tutorials:

[GitHub.com/ChristopherTopalian](https://github.com/ChristopherTopalian)

[GitHub.com/ChristopherAndrewTopalian](https://github.com/ChristopherAndrewTopalian)

[Sites.google.com/view/CollegeOfScripting](https://sites.google.com/view/CollegeOfScripting)

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# Dedicated to God the Father

**This book is created by the  
College of Scripting Music & Science.**

**Always remember, that each time you write a script  
with a pencil and paper, it becomes imprinted so  
deeply in memory that the material and methods are  
learned extremely well.**

**When you Type the scripts, the same is true. The  
more you type and write out the scripts by keyboard  
or pencil and paper, the more you will learn  
programming!**

**Write and Type every example that you find.  
Keep all of your scripts organized.**

**Every script that you create increases your  
programming abilities.**

**SEEING CODE, is one thing,  
but WRITING CODE is another.**

**Write it, Type it, Speak it, See it, Dream it.**

**CollegeOfScripting.weebly.com**