This assignment is intended to ensure that you are able to edit and submit Jupyter Notebooks.

The goal is to write a function to count the frequency of different characters in a given string. For example: character_frequency('google') should return a `dict`: {'g': 2, 'o': 2, 'l': 1, 'e': 1}.

There are many tutorials on the web that can show you how to use the Python data structures. Quite a few examples at: https://docs.python.org/3/tutorial/datastructures.html

You should edit the function definition below, make sure to press 'Shift + Enter' to execute it, and then execute the two function calls to check that the output is correct.

In [4]:
```
def character_frequency(s):
    ret = dict()
    for char in s:
        if char in ret:
            ret[char] += 1
        else:
            ret[char] = 1
    return ret
```

In [5]:
```
character_frequency('google')
```

Out[5]:
```
{'g': 2, 'o': 2, 'l': 1, 'e': 1}
```

In [6]:
```
character_frequency('This assignment is intended to ensure that you are able
```

Out[6]:
```
{'T': 1,
 'h': 2,
 'i': 6,
 's': 7,
 ' ': 15,
 'a': 5,
 'g': 1,
 'n': 6,
 'm': 2,
 'e': 10,
 't': 10,
 'd': 4,
 'o': 6,
 'u': 4,
 'r': 3,
 'y': 2,
 'b': 3,
 'l': 1,
 'J': 1,
 'p': 1,
 'N': 1,
 'k': 1,
 '.': 1}
```

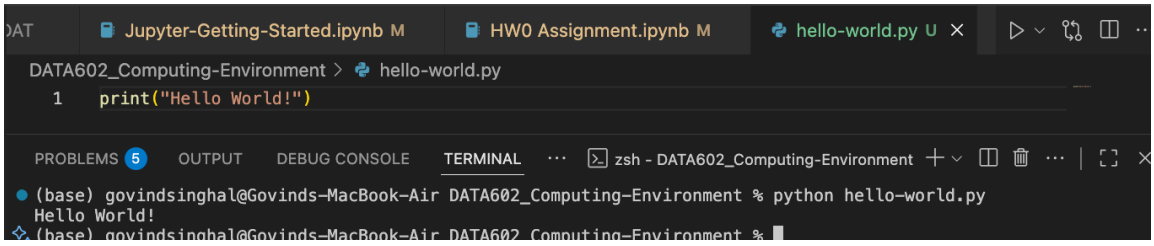
In Below, Provide GitHub Repository URL:

https://github.com/govinds108/DATA602_Computing-Environment/tree/main

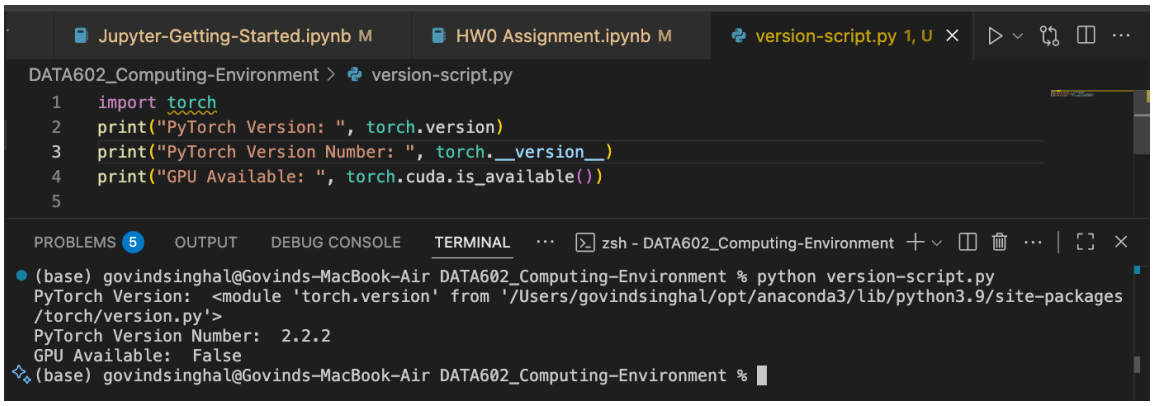
In Below, GitHub Page URL:

https://govinds108.github.io/DATA602_Computing-Environment/

Below, add the screenshots. You can include additional markdown or text cells if needed.




HW0 Google Colab
File Edit View Insert Runtime Tools Help
Commands + Code + Text Run all
[1]
0s
print("Hello World!")
Hello World!
[2]
4s
import torch
print("PyTorch Version: ", torch.version)
print("PyTorch Version Number: ", torch.__version__)
print("GPU Available: ", torch.cuda.is_available())
PyTorch Version: <module 'torch.version' from '/usr/local/lib/python3.12/dist-packages/torch/version.py'>
PyTorch Version Number: 2.8.0+cu126
GPU Available: False


Jupyter-Getting-Started.ipynb M
HW0 Assignment.ipynb M
version-script.py 1, U
DATA602_Computing-Environment > version-script.py
1 import torch
2 print("PyTorch Version: ", torch.version)
3 print("PyTorch Version Number: ", torch.__version__)
4 print("GPU Available: ", torch.cuda.is_available())
5
PROBLEMS 5 OUTPUT DEBUG CONSOLE TERMINAL
zsh - DATA602_Computing-Environment
(base) govindsinghal@Govinds-MacBook-Air DATA602_Computing-Environment % python version-script.py
PyTorch Version: <module 'torch.version' from '/Users/govindsinghal/opt/anaconda3/lib/python3.9/site-packages/torch/version.py'>
PyTorch Version Number: 2.2.2
GPU Available: False
(base) govindsinghal@Govinds-MacBook-Air DATA602_Computing-Environment %