

Student Name (print): _____

This assignment contains 3 pages and is due at **11:59 pm on Sunday**.

Question:	1	2	3	4	Total
Points:	5	5	10	20	40
Score:					

Instructions: This homework assignment is divided into two sections:

- The first part requires you to submit a file that contains two screenshots (#1-2) and a reading assignment on basic Python code (#3).
- The second part, problem 4, is a programming assignment. For this, you will work out the entire code, save your changes, and submit the *ipynb* file.
- You will need to submit one single file for problems 1-3 and your modified code for problem 4.

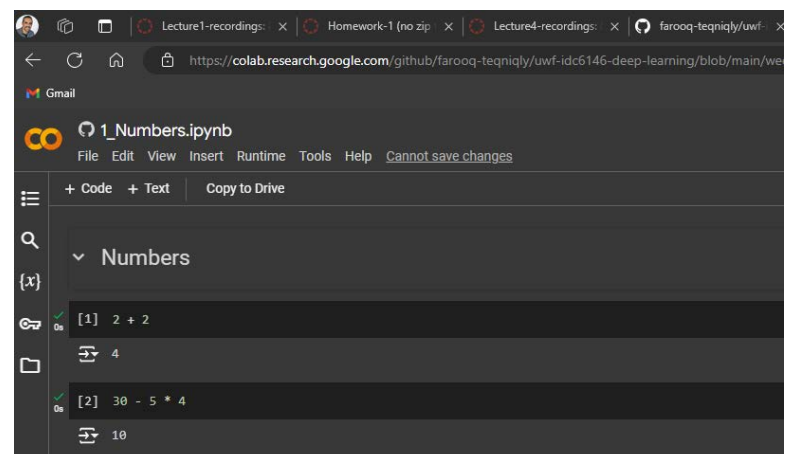
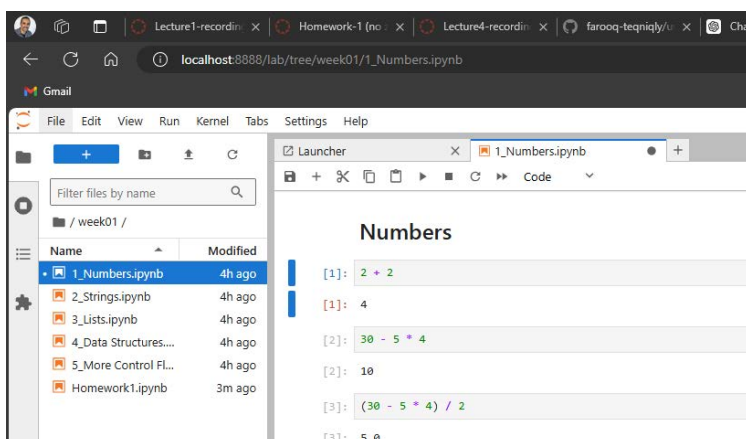
1. (5 points) **Install Python 3** Submit a screenshot when finished (showing that you have Python installed).

```

farooq@F00QLT1401 > C:\src\my\uwf-idc6146-dee
> python --version
Python 3.12.5
farooq@F00QLT1401 > C:\src\my\uwf-idc6146-dee
>

```

2. (5 points) **Install Jupyter Notebook and get access to Google Colab** Submit a screenshot when finished (showing that you have Jupyter Notebook installed and have access to Google Colab). Note: the free version of Google Colab is sufficient for now.



3. (10 points) **Understanding basic Python code and algorithms.** For each of the following fragments of code, write what the output would be. **Do this without running the code; there are some typos** (although feel free to check yourself when you're done).

```
num = 10
while num > 3:
    print(num)
num = num -1
```

Assuming lines 3 and 4 are properly indented, they are part of the while loop and will print out:

10
9
8
7
6
5
4

If line 4 is indented at the same level as line 1 then an infinite loop results.

```
divisor = 2
for i in range(0, 10, 2):
    print(i / divisor)
```

Assuming the print statement is properly indented and part of the for loop, the output is:

0.0
1.0
2.0
3.0
4.0

There is a decimal because division returns a float.

```
num = 10
while True:
    if num < 7:
        break
    print(num)
num -= 1
```

Assuming the indentation is correct and the intent of the program is to print numbers greater than 6, the output would be:

10
9
8
7

```
count = 0
for letter in 'Snow!':
    print('Letter #', count, 'is ', letter)
    count += 1
```

Assuming lines 3 and 4 are indented under the for loop, the output would be:

Letter # 0 is S
Letter # 1 is n
Letter # 2 is o
Letter # 3 is w
Letter # 4 is !

4. (20 points) Complete the coding tasks in the file titled *Homework1.ipynb* Instructions:

- The code with all other example codes is available in [Google Drive](https://drive.google.com/drive/folders/1P_ErP4X5AGWGxQ5xEZK4u956AD3DYMIS?usp=sharing):
https://drive.google.com/drive/folders/1P_ErP4X5AGWGxQ5xEZK4u956AD3DYMIS?usp=sharing
- Once you've finished, save your work and rename the file by appending your initials. For instance, if your name is Shusen Pu, you should rename the file as "Homework1-SP.ipynb".
- Make sure all your inputs in the code are saved. Then close Jupyter Notebook (or Google Colab) and reopen the renamed file (in my case, "Homework1-SP.ipynb") to confirm that all your answers have been saved properly.
- Upload your modified code on Canvas under this assignment.

I will subsequently review and run your code in order to grade your assignment.