

C1_W1_Lab01_Python_Jupyter_Soln

March 20, 2024

1 Optional Lab: Brief Introduction to Python and Jupyter Notebooks

Welcome to the first optional lab! Optional labs are available to: - provide information - like this notebook - reinforce lecture material with hands-on examples - provide working examples of routines used in the graded labs

1.1 Goals

In this lab, you will: - Get a brief introduction to Jupyter notebooks - Take a tour of Jupyter notebooks - Learn the difference between markdown cells and code cells - Practice some basic python

The easiest way to become familiar with Jupyter notebooks is to take the tour available above in the Help menu:

Jupyter notebooks have two types of cells that are used in this course. Cells such as this which contain documentation called **Markdown Cells**. The name is derived from the simple formatting language used in the cells. You will not be required to produce markdown cells. Its useful to understand the **cell pulldown** shown in graphic below. Occasionally, a cell will end up in the wrong mode and you may need to restore it to the right state:

The other type of cell is the **code cell** where you will write your code:

```
[1]: #This is a 'Code' Cell
    print("This is code cell")
```

This is code cell

1.2 Python

You can write your code in the code cells. To run the code, select the cell and either - hold the shift-key down and hit 'enter' or 'return' - click the 'run' arrow above

1.2.1 Print statement

Print statements will generally use the python f-string style.

Try creating your own print in the following cell.

Try both methods of running the cell.

```
[2]: # print statements
variable = "right in the strings!"
print(f"f strings allow you to embed variables {variable}")
```

f strings allow you to embed variables right in the strings!

2 Congratulations!

You now know how to find your way around a Jupyter Notebook.