MIS3536 – Assignment 3

Python / Anaconda / Jupyter Notebook Proficiency

In this assignment, you will demonstrate your ability to write a simple Python script with the assistance of AI.

Advisory – You are *allowed* to use AI to complete this assignment. In the instructions that follow, I explicitly direct you to use AI.

At the end of the assignment, you will turn in three things.

- 1. Your Jupyter notebook (a file that ends with the .ipynb extension.)
- 2. A screenshot of your code (as a .png, .jpg, .jpeg, or .gif)
- 3. A screenshot of the graph it generated (as a .png, .jpg, .jpeg, or .gif)

You don't need any programming experience to do this. Just follow along and get some AI help along the way.

Pre-requisites

- You will need Anaconda Navigator installed. Earlier in the semester, we dedicated class time to setting this up, and everyone assured me that it was running just fine.
- You will need a ChatGPT account. A "free tier" account should be fine for this assignment. See https://openai.com/chatgpt if you have never been there before.
- You are welcome to try out another AI resource if you want to play around. Gemini, Venice.ai, Mistral.ai are all good options, and I am sure you can come up with others.
- You'll need to be able to take a screenshot. If you don't know how to do this, you should Google it or ask ChatGPT for instructions. It's a basic skill that you should have.

Instructions

1. Watch this video. https://youtu.be/jzFRPlCTSsA

It will walk you through the process of setting up your assignment3 folder on your own computer. It's important for students to have some notion of where things (files and folders) are on their own laptops.

Be careful that you provide the comments and cells prescribed in the video. You will lose points on the assignment if you cut corners there.

- 2. Now go generate some code. I generated my code with these two prompts:
 - "Write me a python script that plots a diagonal line on a cartesian coordinate grid"
 - "The script should allow me to specify two variables, slope and intercept"
- 3. OK. In this super short video we are going to copy / paste the code you just generated into the third cell of our Jupyter Notebook, and test it.

https://youtu.be/-uTnQt1z4x8

4. Take a screen shot of your code. Save your file as a png, jpg, jpeg, or gif.

All your code should be visible, as well as the location of the code on your computer as shown in the address bar of your browser. Look at the example below.

- The address bar has been circled in red and the window is big enough that I can see the whole URL.
- Some of this code has been deliberately obfuscated. I want you to provide your own code. Not mine.



- 5. Now take a screenshot of your graph. Again, save it as either a png, jpg, jpeg, or gif file.
- 6. Go to canvas, and upload all three things:
 - a. Your notebook: assignment3-lastname.ipynb
 - b. Your first screenshot (of your code)
 - c. Your second screenshot (of your graph)

How will this assignment be graded?

This assignment will be graded on a 100 point scale.

There's very little independent effort expected of the student in this assignment. So, if you do everything as directed, then you should get 100.

However, you can lose points for sloppy or inattentive work. Here's a rubric to cover some possible scenarios.

- 1. Missing/incorrect comments -10 points each
- 2. Failing to follow naming conventions -10 points
- 3. Failure to provide a Jupyter notebook that your instructor can run.
- 4. Missing or unreadable graphic -30 points each.
- 5. Problems with the graphic (as in, weirdly cropped or obscured) 15 points each

Of course, late penalties and expectations for academic integrity as outlined in the syllabus apply as well.