As you look back on this semester, please take a moment to reflect on your experience, recognizing the challenges, successes, and all that you've learned along the way.

Please respond thoroughly to the following questions (likely about 1-2 paragraphs each).

1. What is one program you wrote that you were particularly proud of during this course? Why were you proud? Explain.

The one program that I wrote that I was particularly proud of is the Data Analysis program in weeks 11 and 12. The project took me at least 10 hours to complete. The program had a series of steps that had to solved one at a time, and I found myself running into multiple obstacles. I remember when I first faced the serious problem regarding accessing the correct indexes for multiple items in a list, I paused and said a prayer. After hours of revisiting the lesson materials and internet search, I began to have the program logic unfolded in my mind. As I began to make sense of what I needed my program to do, I began to succeed. In the end, I was able to go above and beyond the lesson requirements. I had the maximum and minimum drop in life expectancies computed as well as the maximum increase in life expectancy. I computed the standard deviation and correlation (using **import numpy as np,** after downloading numpy using **pip install numpy** in the terminal) for data set. I was also able to ask the user for the country to analyze and the country to compare with then give the average, maximum, and minimum life expectancies, and the respective years.

The sacrifice I made to spend so much time on the program made me feel proud. I have learned that I can solve problems. I also learned that problem solving requires patience. I feel that as a programmer, there will be unique problems that I will need to solve, and each problem will require a unique solution. I am glad that I have the tenacity to endure until the problem is solved.

1. How might you use the skills you learned in this course in the future? This might include skills such as programming, problem-solving, debugging, etc.

I will use the skills I have learned in this course to develop programs in my current job in logistics and agricultural research and development. I have learned of the niche that is available in my current profession and I will use my skills to develop programs to help in my company. For example, I can write programs that will provide services and solve our clients’ problems in a technical way, tailored for each client. There is an unlimited number of solutions I can exploit in my profession using the skills I have learned in the course.

1. Describe an experience from this class that has given you confidence that you can learn new programming skills in the future.

My experience in this class is one of the greatest miracles I have seen. I am new to programming. I had heard of Python but have never used it prior to this class. In our first assignment, I did not even know how to set different variables for different inputs. That’s how new I was to programming. But over the course of the class, I have learned to write more complex code and solve intricate problems and go above and the requirements of every assignment. At this stage, I am very confident I will write better and elegant code in the future.

My goal is a career in data science and with the progress I have seen so far, I am confident I will achieve that goal. The experience I had in this class will prepare me for a career in data science as I seek to solve problems in the agricultural sector in my country and region.