Activities: List everything related to this course that you accomplished this week. Look over the goals that you have set. State what you achieved.

This week, I learned:

- 1. Types of telescopes
- 2. Properties of telescopes
- 3. Stellar Parallax
- 4. Luminosity, apparent magnitude, and absolute magnitude
- 5. Distance Modulus (and its derivation)
- 6. Different types of information that can be gained from stellar spectra
- 7. Binary stars and their classifications and properties
- 8. How to get the mass of a visual binary system
- 9. Star classifications (spectral and luminosity) and the H-R diagram
- 10. Properties of Main Sequence Stars
- 11. Interstellar Medium, gas clouds, dust, and nebulae
- 12. The life cycle of a star
- 13. Simulate the sun, earth, and moon in Python
- 14. SQL

Challenges: List any challenges that you faced or difficulties that you had to overcome.

One challenge I faced was accurately simulating the sun, earth, and moon in Python. Since they are so small compared to the distance between them, it was hard to accurately visualize them in the simulation. I resolved this issue by accurately scaling up their sizes and the distance between them proportionately.

Plans: List what you want to accomplish next week. Be realistic. You are setting your own goals. Next week, I want to get an A on the midterm (as I was told was expected of me;)) as well as decide on my research group and topic.

Comments: Let me know of any concerns, issues, observations, or opinions that you may have. This could also be the place where you reflect on your own study.

Everything has been going well so far! Thank you for your wonderful teaching!