At this point in time, I have done two big things related to this project. The first is that I have programmed my algorithm in Python to work in the command line. This is a basic step towards getting my project to work as it shows I have the logic and math working correctly. This code is in my GitHub repository and is named algorithm.py

The next step for my project is working on the animation aspect, which will take me the longest amount of time. At this point in time, I have started looking into what library (or libraries) I might use to do this. I've considered using Turtle to start as even though it's rudimentary, it would be a good way to test that this animation will work well. Turtle has a few pitfalls though, as I can't draw more than one line at once. My preferred animation would start at the north, south, east, and west points and draw the circle in at the same time, and Turtle can't really do that. One library I looked into was Matplotlib, as I think it could be cool to represent this on a graph and have my program color in grid blocks to make a circle. Another graphics library I'm considering using is Cairo (specifically pyCairo). This one looks more like something that would work for what I want to do but I also do need to look into a little more. The docs say I need a C compiler which is confusing to say the least. I've also looked into libraries meant more for video game development, such as Pyglet. Pyglet I like because I would also be able to build a GUI on top of it to accept the starting point and the radius.

This research has made me think that I might use multiple libraries to create multiple animations, mostly because I think it would be good experience using multiple Python libraries. I also would like to implement a non-command-line way of accepting the arguments for the animation. I still have more research to do but I think I will be attempting an animation with Turtle in the short-term.