Journal Report 9
11/11/19-11/18/19
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Period 1, White

Daily Log

Detail for each day about what you researched, coded, debug, designed, created, etc. Informal style is OK.

Monday November 11

I printed out the angles, but all of them were similar, so I could not figure out where the extra points came from.

Tuesday November 12

I plotted the points and realized that the extraneous points were just very close to the existing vertices since the graph showed 6 vertices. I then removed points that were within 10 units of the previous point. This reduced the hull down to six.

Timeline

Date	Goal	Met
10/28	Understand convex hull methods.	I am close to being able to successfully implement it in my code
11/11	Implement convex hull method in my code	Yes, I found the convex hull, but it returns some extraneous points that are along the sides as well.
11/18	Reduce the points returned to just the six vertices	Yes, I successfully reduced the hull to just six points
11/25	Once the outer 6 vertices are known, figure out where each visible square is	
12/2	Figure out the colors in each of the visible squares	
Winter goal	Be able to output a data structure with all squares that are visible given an image of a cube	

Reflection

In narrative style, talk about your work this week. Successes, failures, changes to timeline, goals. This should also include concrete data, e.g. snippets of code, screenshots, output, analysis, graphs, etc.

At first, I could not figure out where the extraneous poitns came from. However, I plotted the points and only saw six points. I realized that the reason was that the extraneous points were just very close in location to the six points on the convex hull. I then measured the distance between every pair of points and removed one of them if the distance was less than 10. This finally reduced the hull down to six points.