Ray tracer intersection Journal

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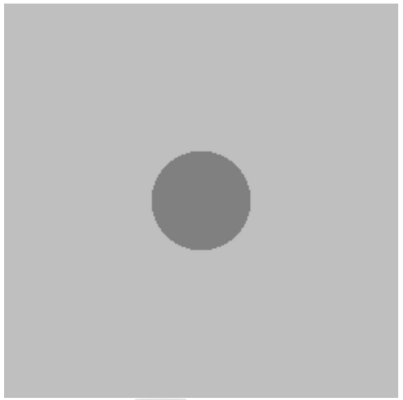
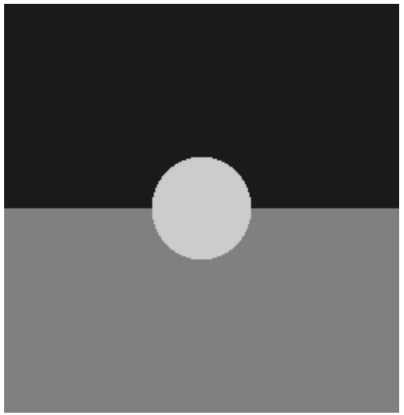
This week, I have started implementing the ray and sphere process which was quite enjoyable. I really enjoyed watching the sphere slowly evolve from a 2D to a 3D object. I even adjusted the dimensions of the vector as shown on the top right corner to spike my curiosity on how the sphere would look. The second image is the sphere over the black and grey shading. Ray tracing is rendering images from a point from where the person see hitting another point where an object is located. I found this very insightful in class when Prof Guerrero explained how a sphere and plane have to “hit” a point in order for a ray to cast when I was attempted to program the image for the rays.





I found the part tricky about neutralizing the plane and sphere result and their length to give an image like the one on the right to find the length of the sphere and ray to create a shadow and light rotating around the sphere. I really did want to add colors and the walls to the sphere but unfortunately ran out of time. Overall though, I am proud of the progress me and my partner made with this sphere and have learned a lot about how race tracing works going from one point to the next.