MPCS 51087 Project 2, Milestone 1
Ray Tracing - Serial Implementation

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This milestone shows a serial implementation of ray tracing to render a three-dimensional sphere illuminated by a single light source.

Methodology:

The ray-tracing algorithm was implemented in C and the results were visualized in python using MatPlotLib.

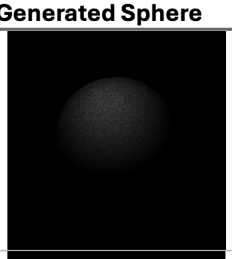
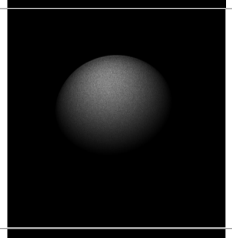
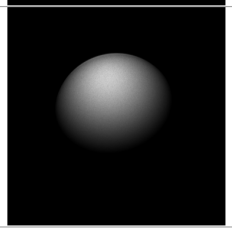
Number of Rays	Time (s)	G: Generated Sphere
1 million **1e6**	**0.400753**	
10 million **1e7**	**4.065462**	
100 million **1e8**	**40.059221**	

Figure 1: Times and plots of G for different number of rays.

Usage:

On command line:

Compile:

```
$ gcc -fopenmp -O3 -o serial ray_tracing_serial.c -lm
```

Run: Two command line arguments – number of rays, grid dimension.

```
$ ./serial N_rays n
```