

Programming Exercise 8: Ray tracing

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Introduction

In this exercise, you will implement a simple ray tracing algorithm (see figure 1) to perform global illumination. Before starting on this programming exercise, we strongly recommend watching the lectures.

The input should be some source lights, the camera, the scene with their properties. For example, the scene will include some simple shapes such as boxes, spheres, cylinders and these shapes may be located in a room with walls. The Walls or the floor may be textured.

The output of your program should be a rendered image seen by your camera. Of course, you could change your camera or source lights to view rendered images from different viewpoints. See a typical result in figure2.

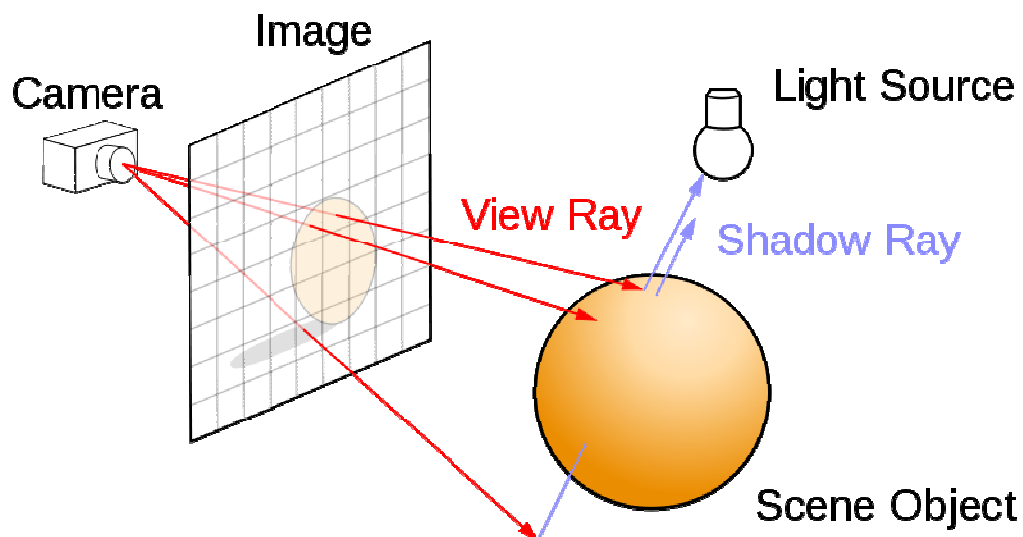


figure 1



figure 2 a typical ray tracing result

This programming exercise are due 2012/12/2 PM at 23:59