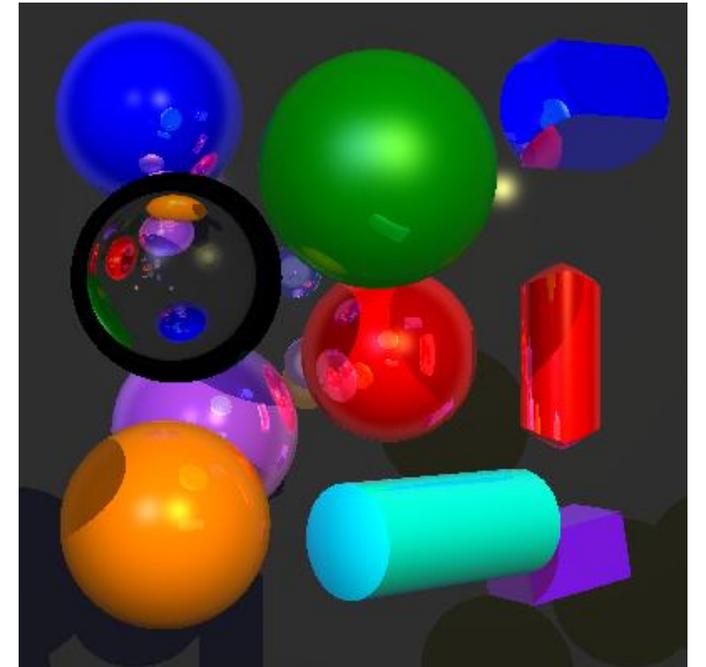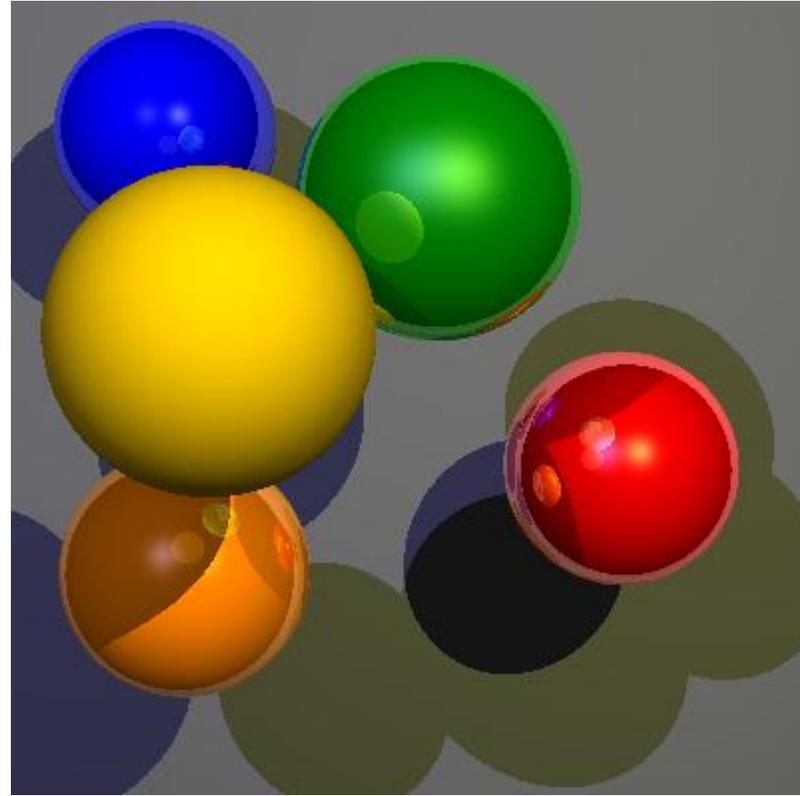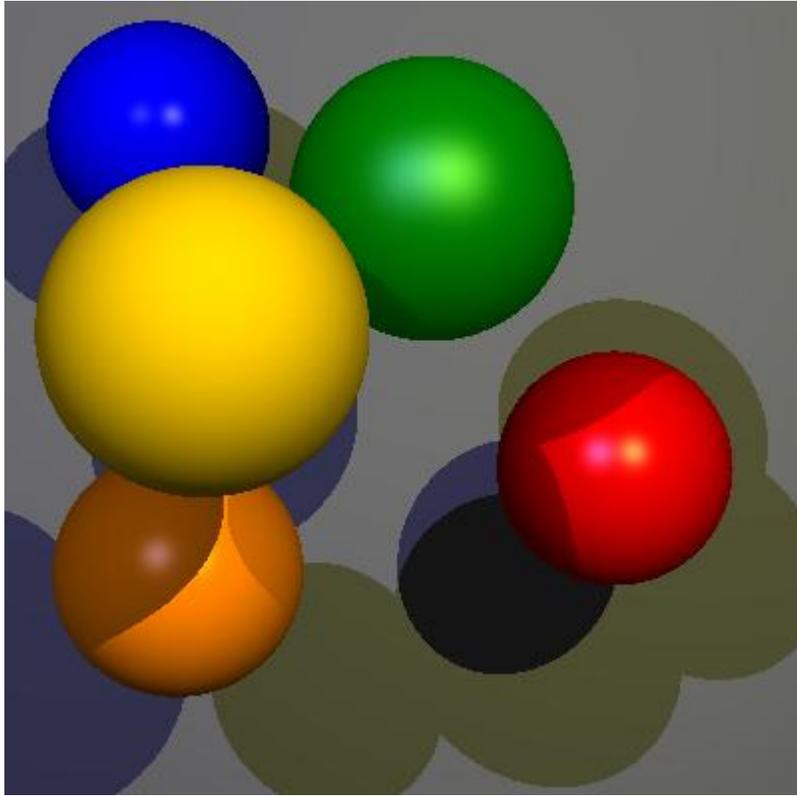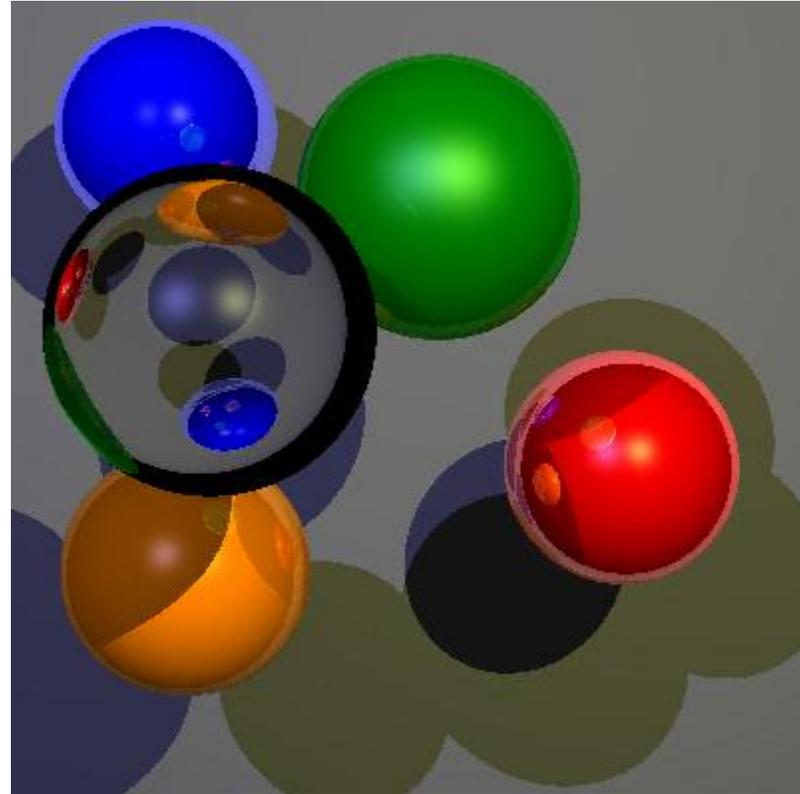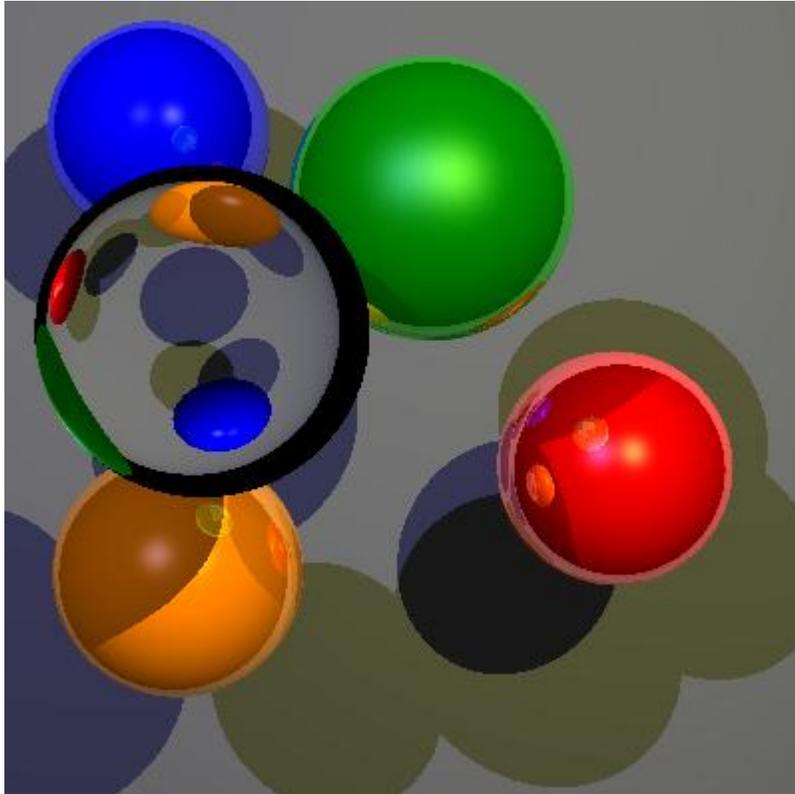**Lab Sessions**

Photorealistic Rendering (Advanced Computer Graphics)

Tobias Isenberg

Results
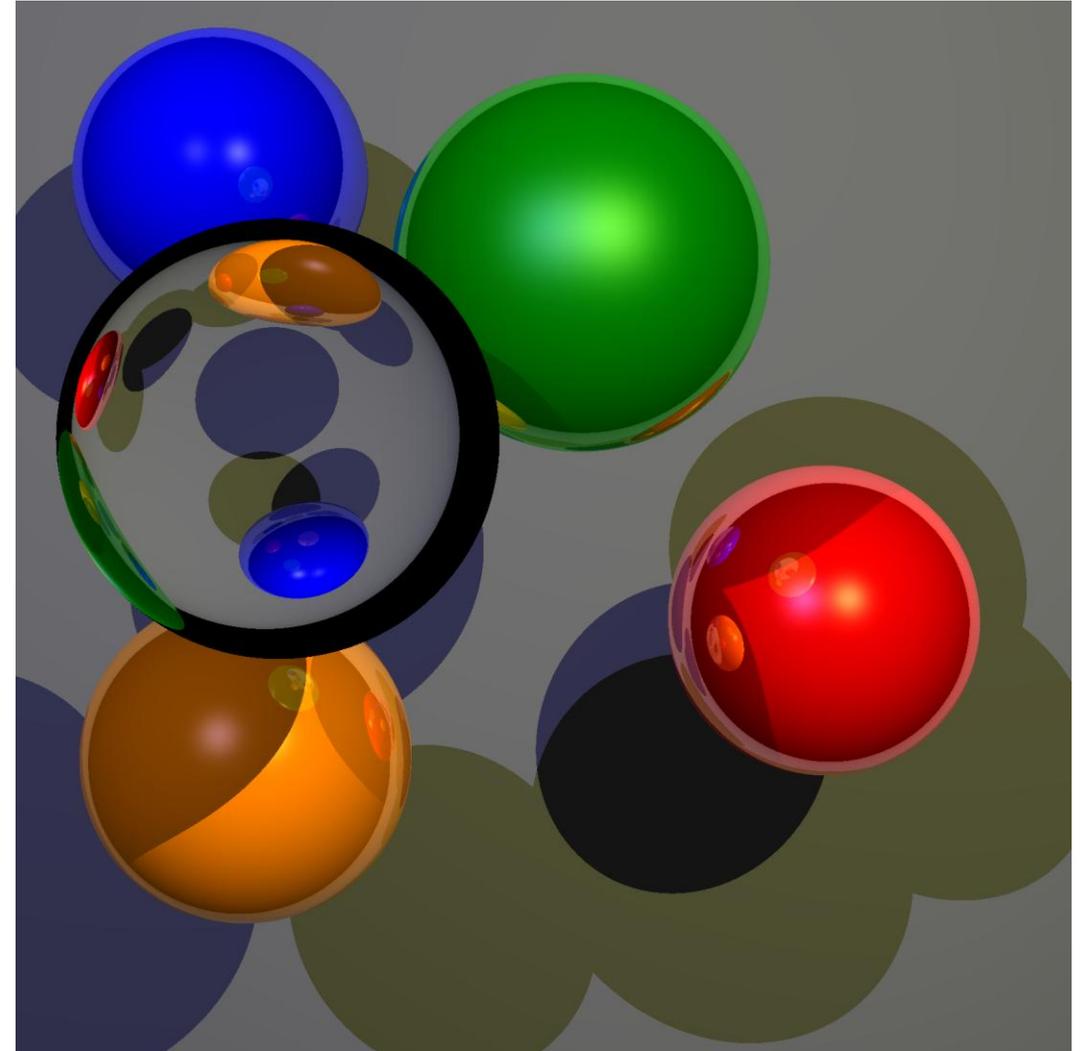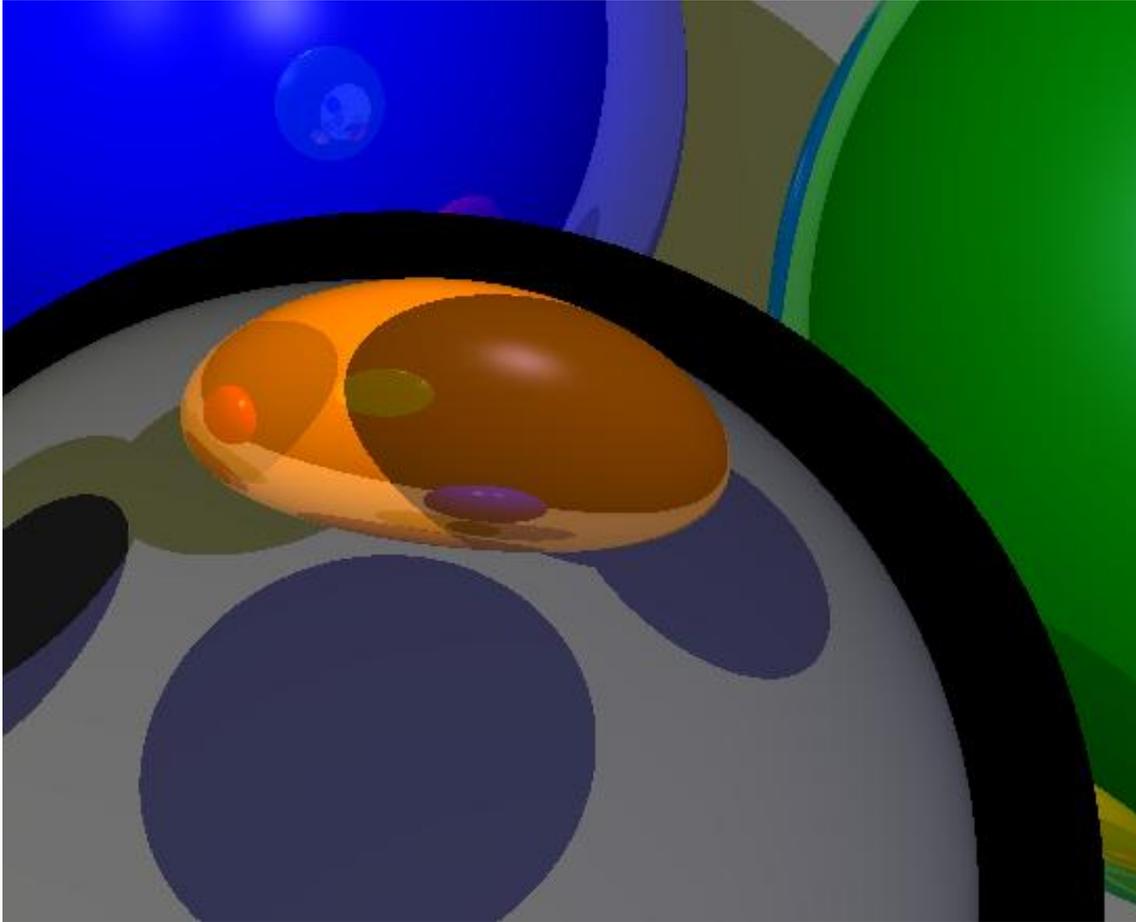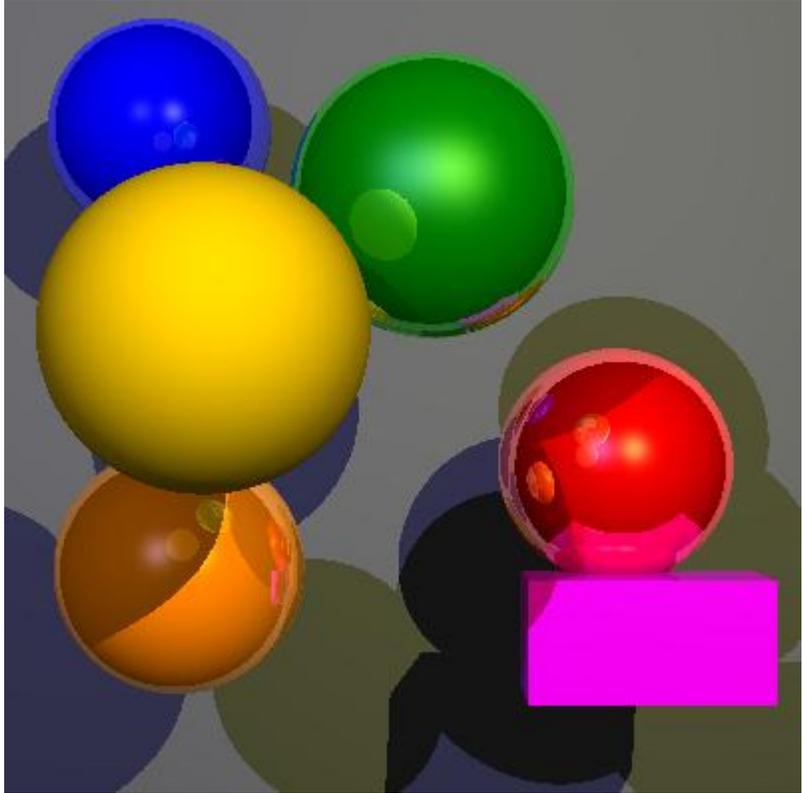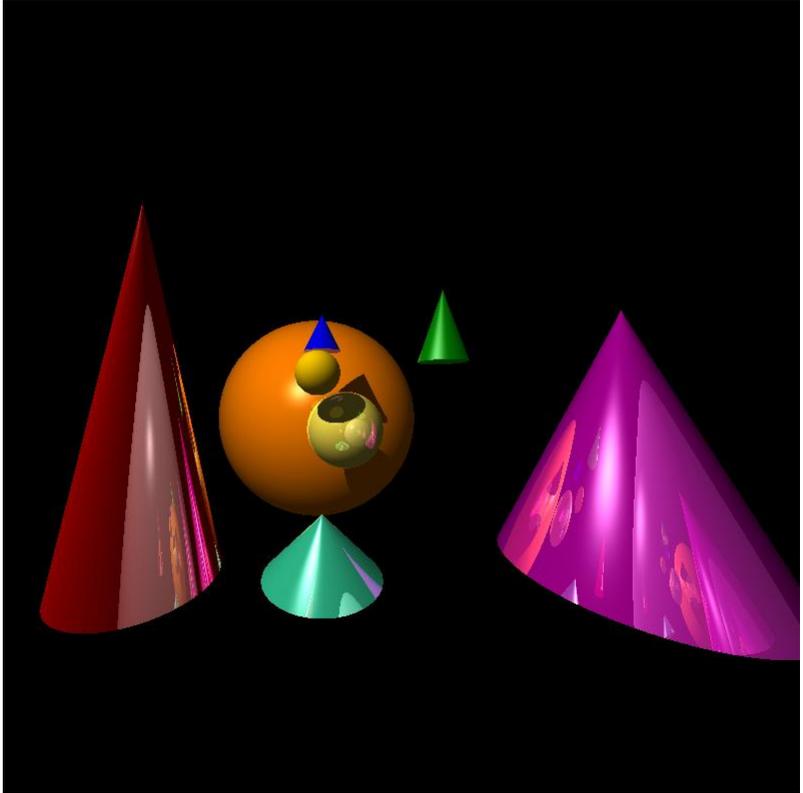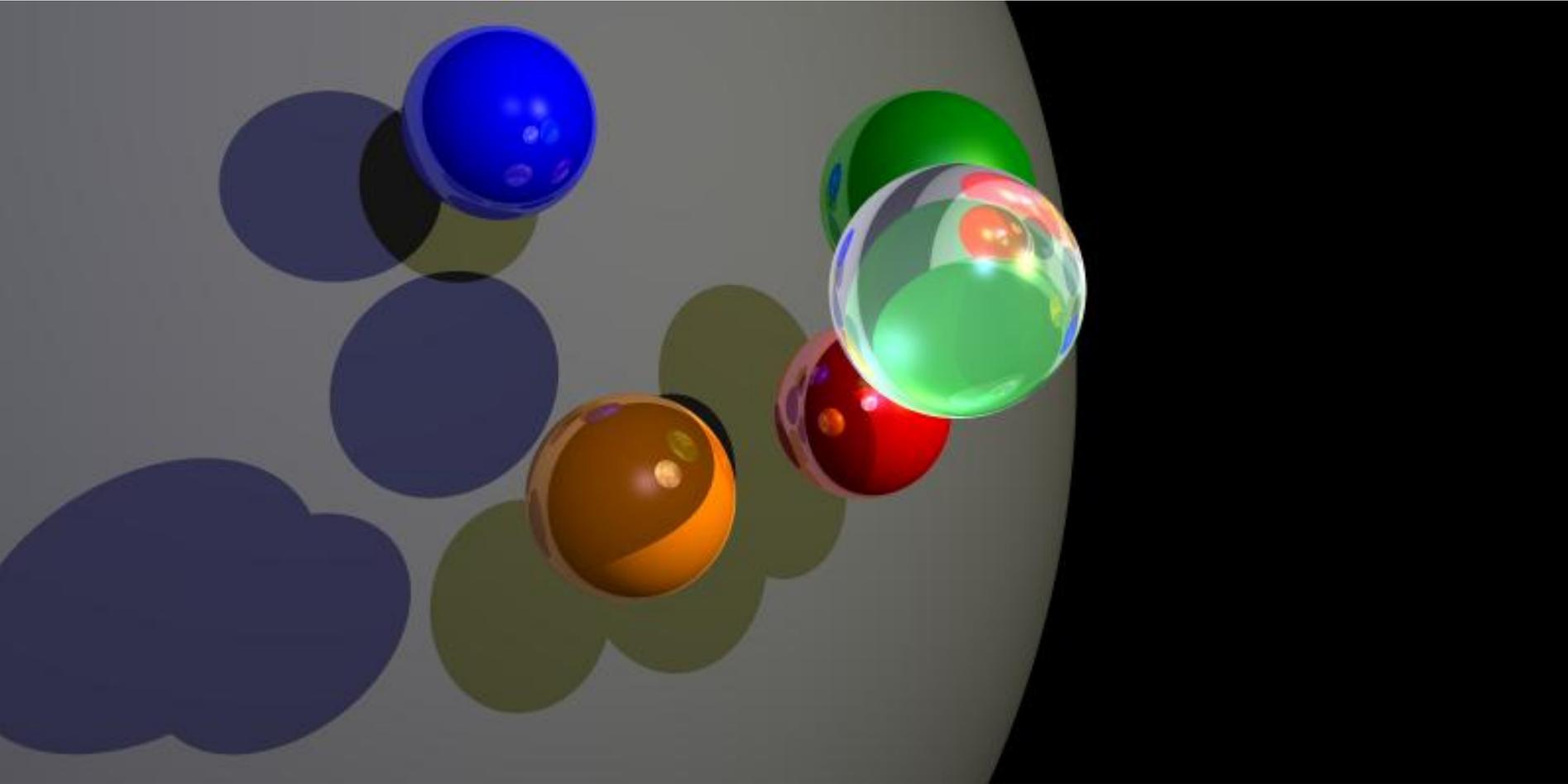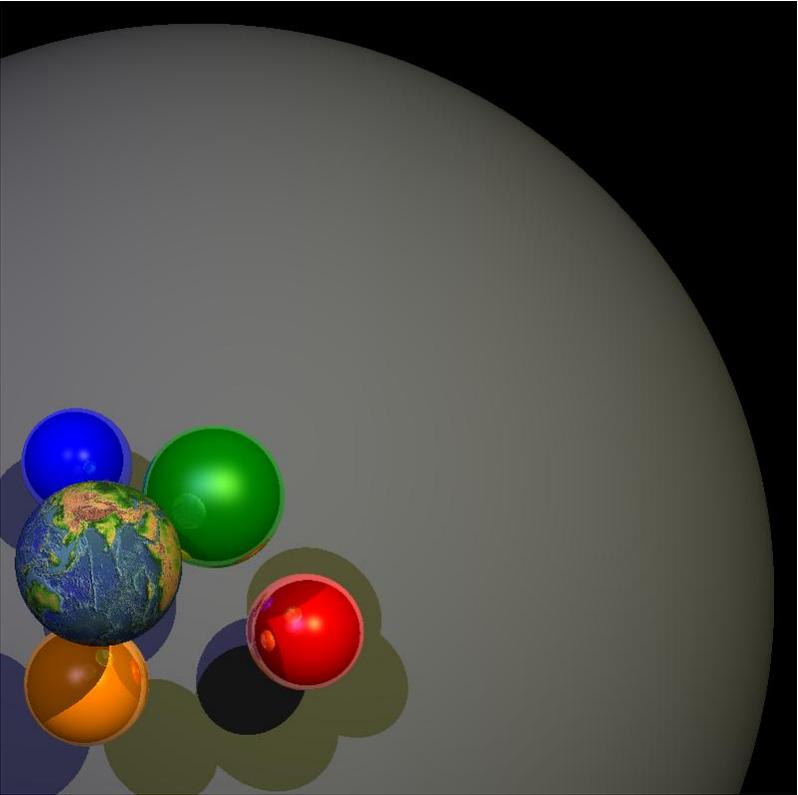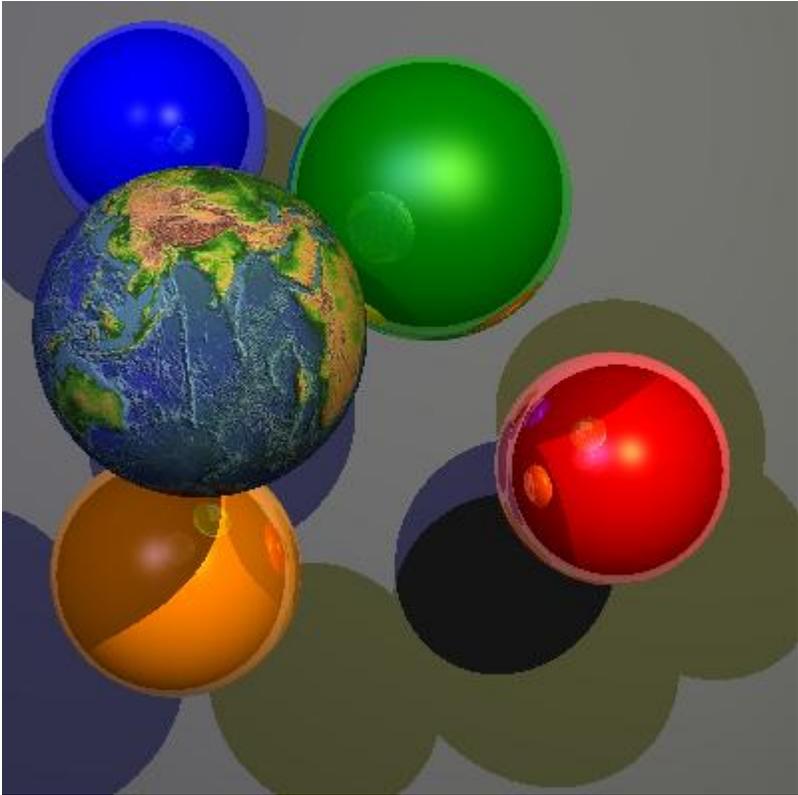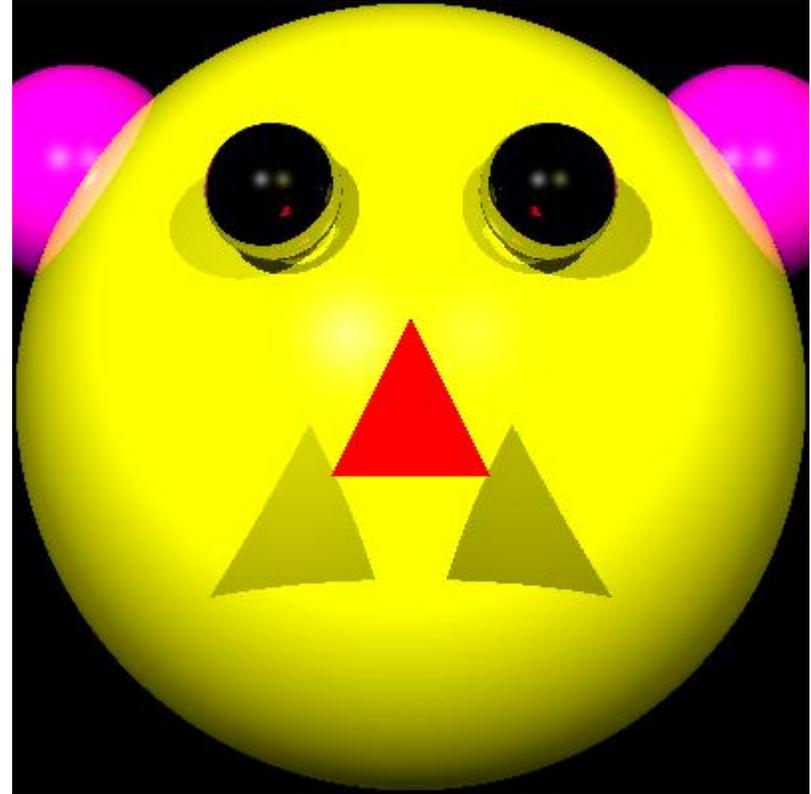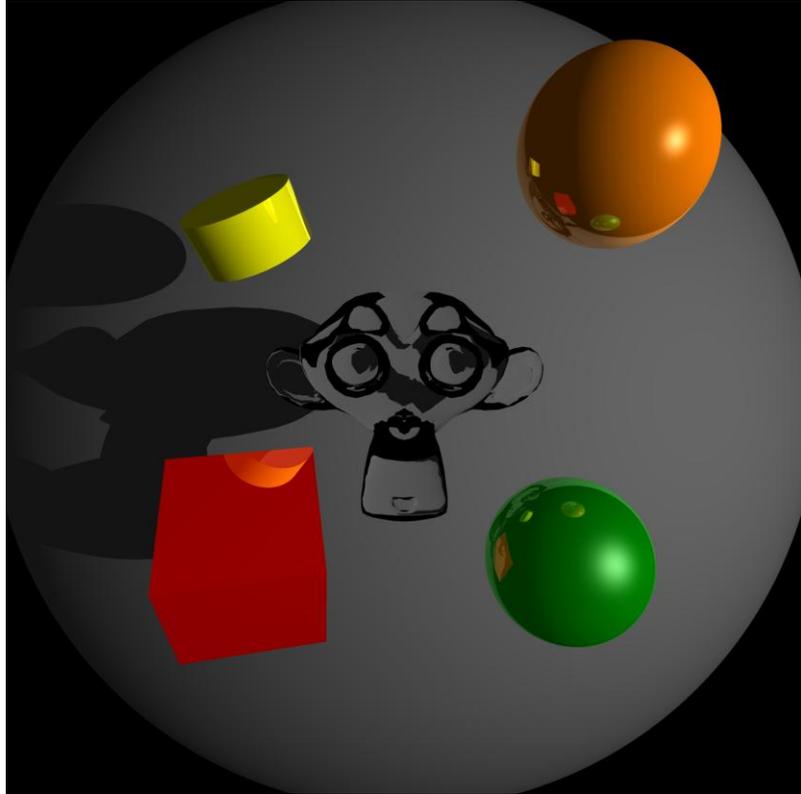
Results

Results in high resolution

Actual results

Actual results assignment 4
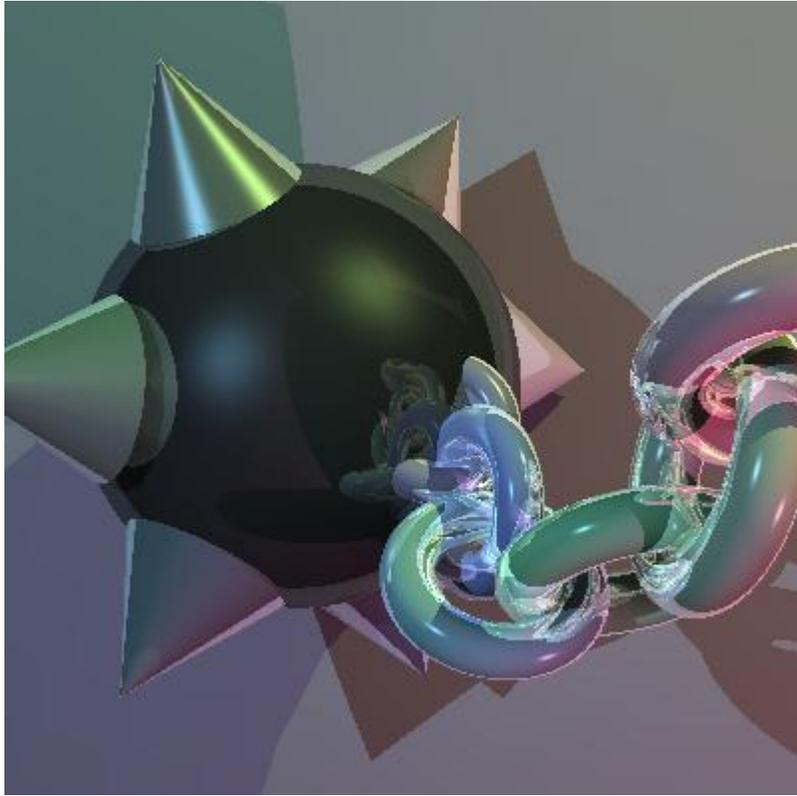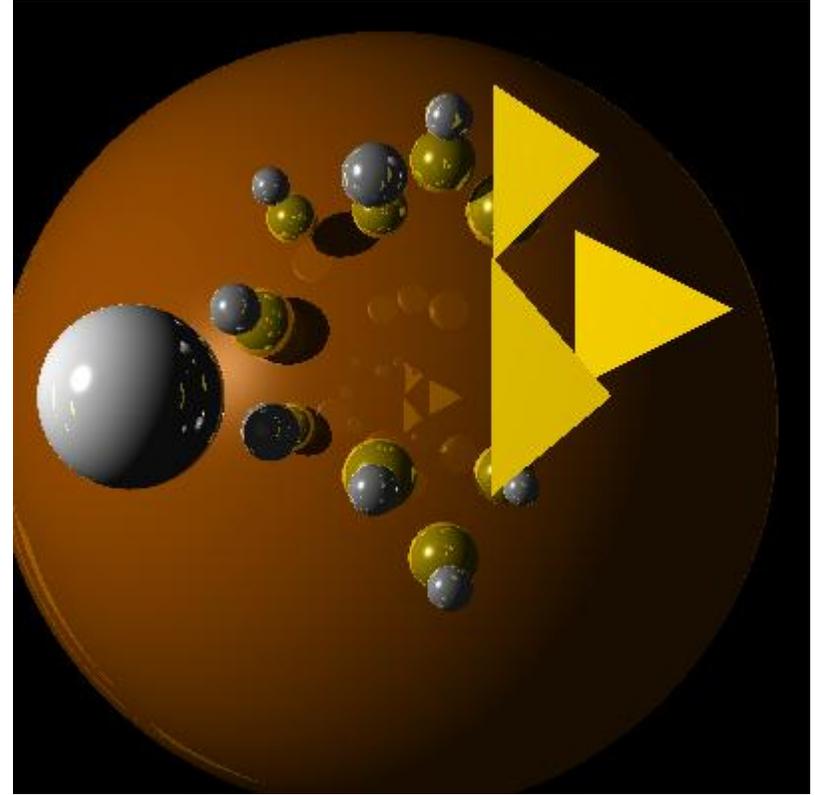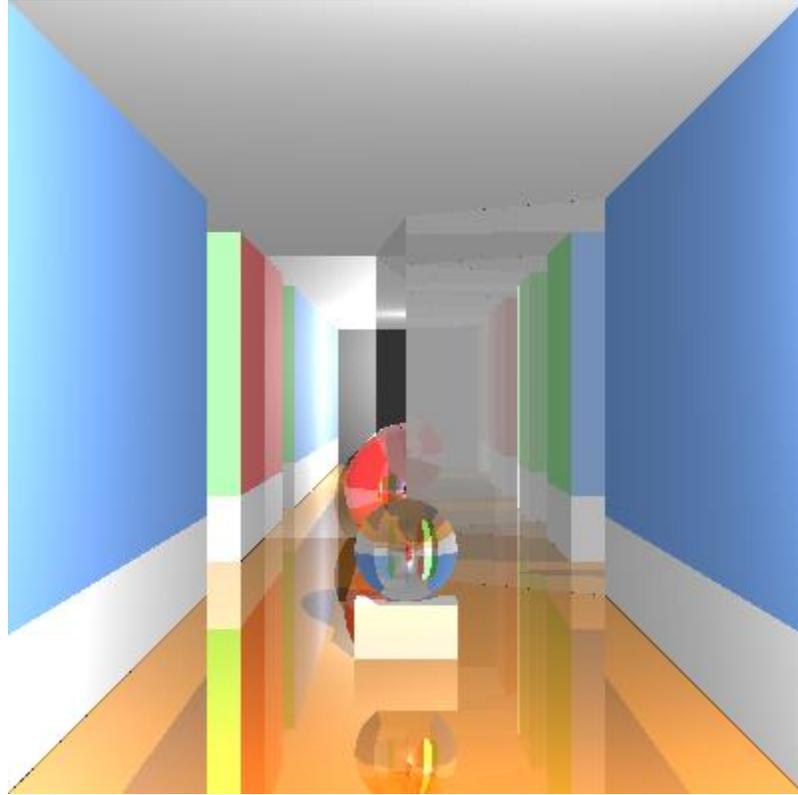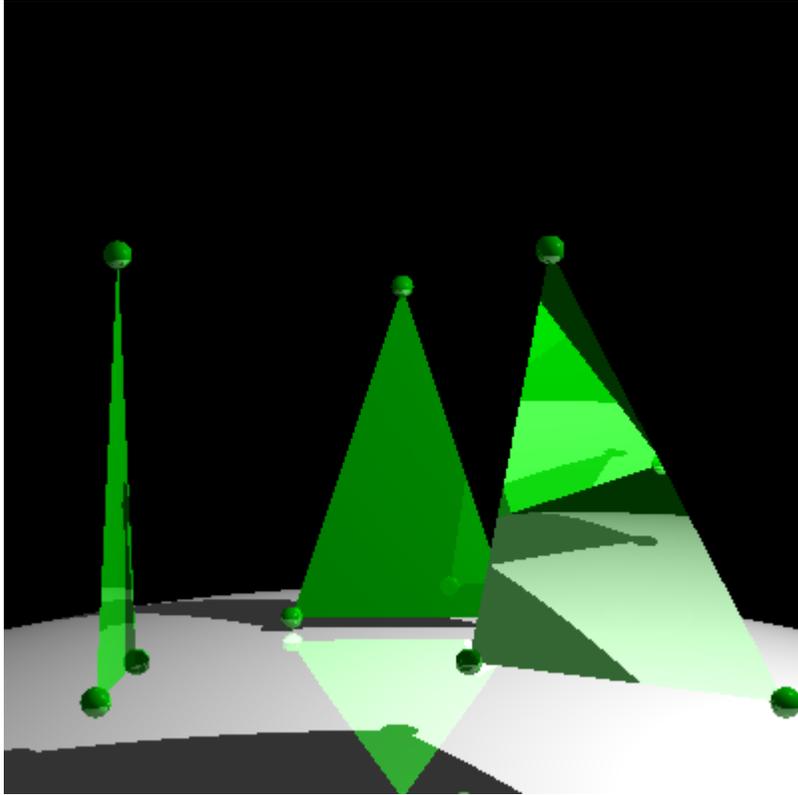
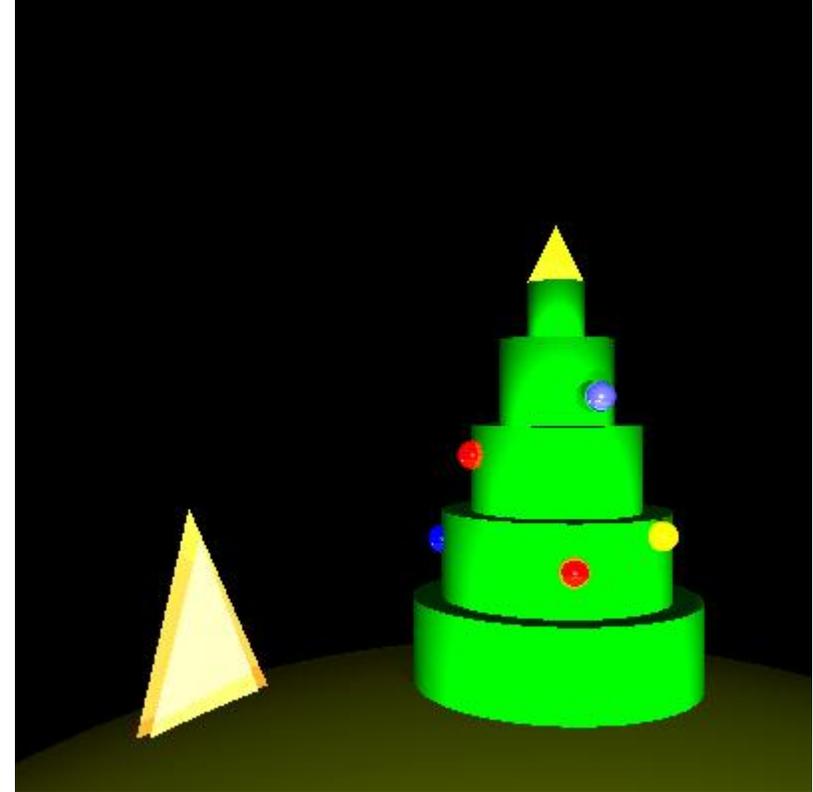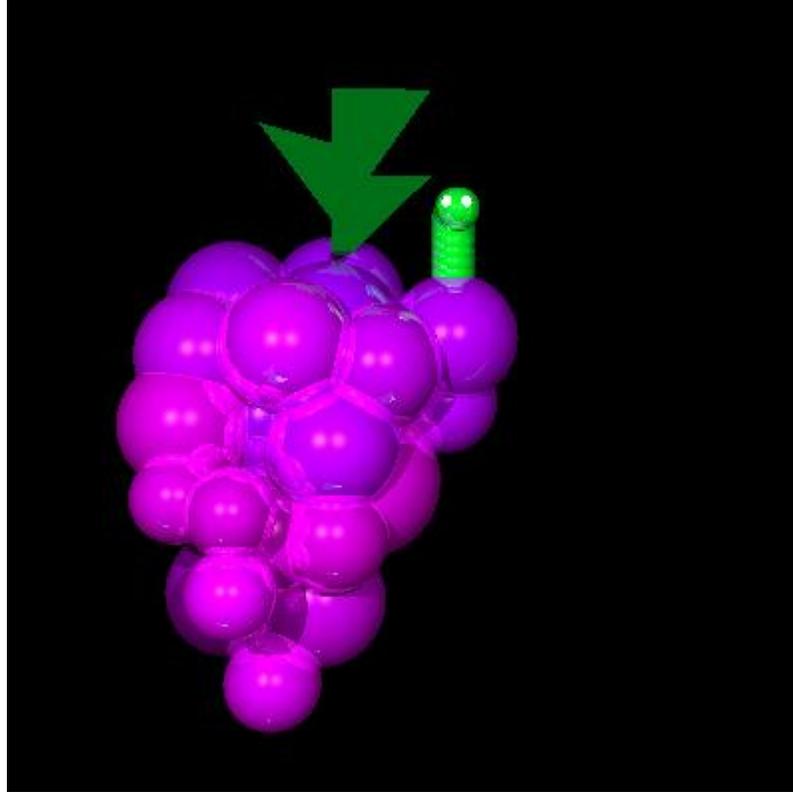# Actual results assignment 5.1

Results (previous years)

Results (previous years)
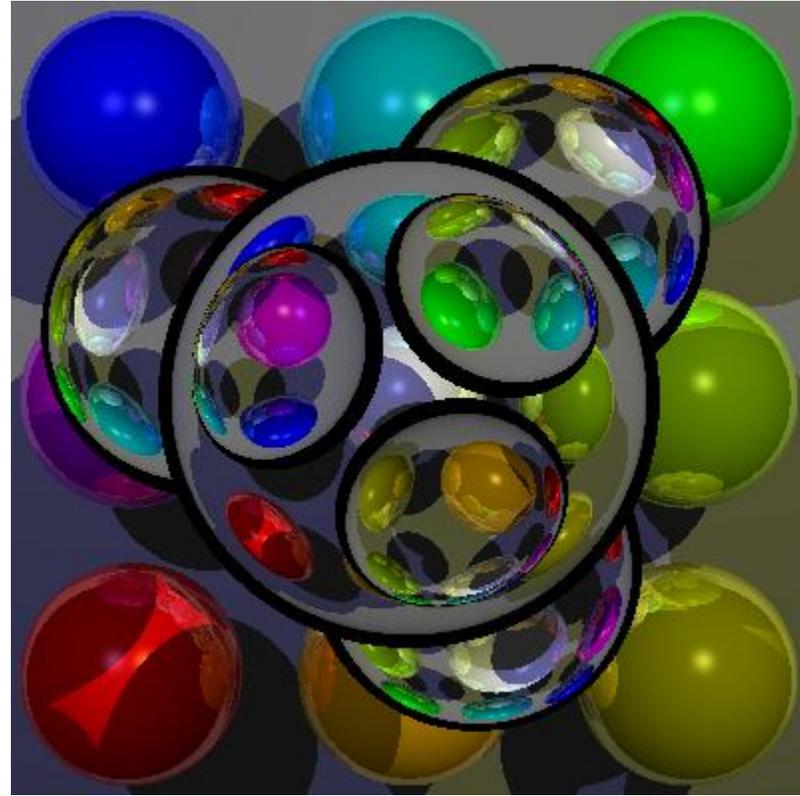
Results (previous years)

Results (previous years)

Interesting errors
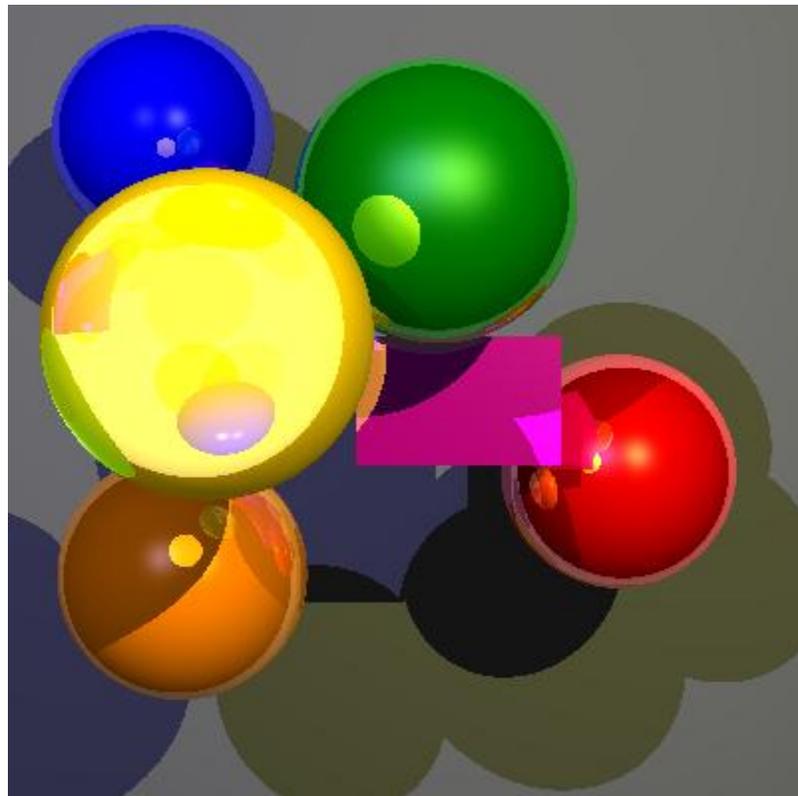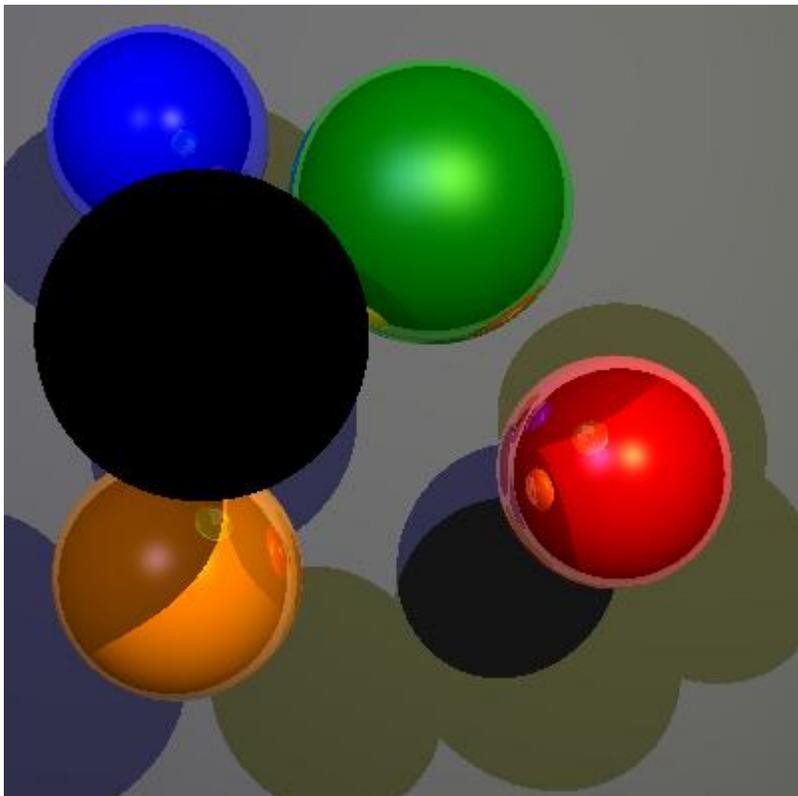
Interesting errors

Interesting errors (previous years)
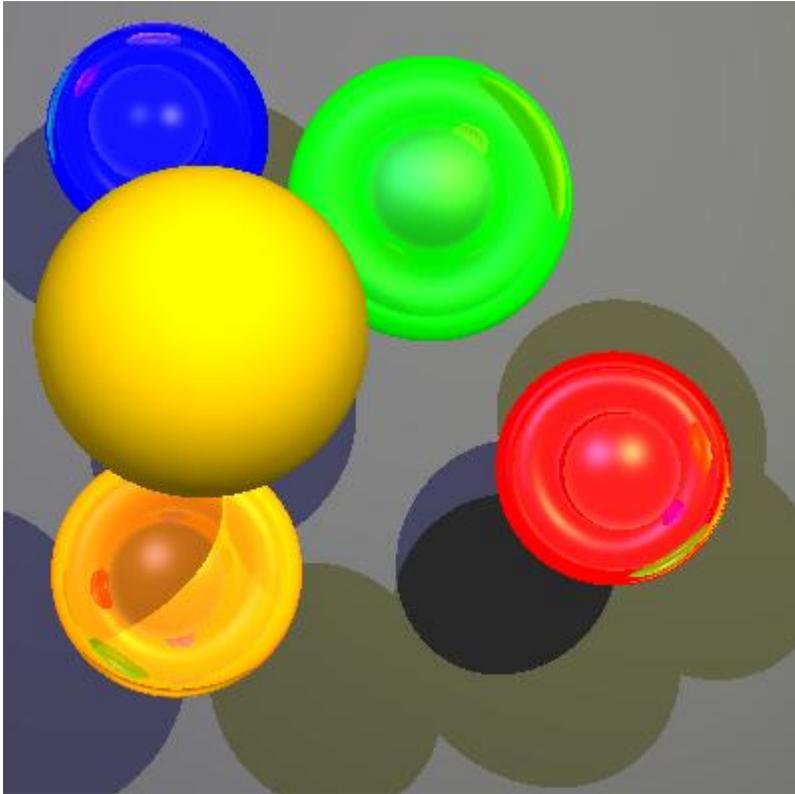
Interesting errors (previous years)
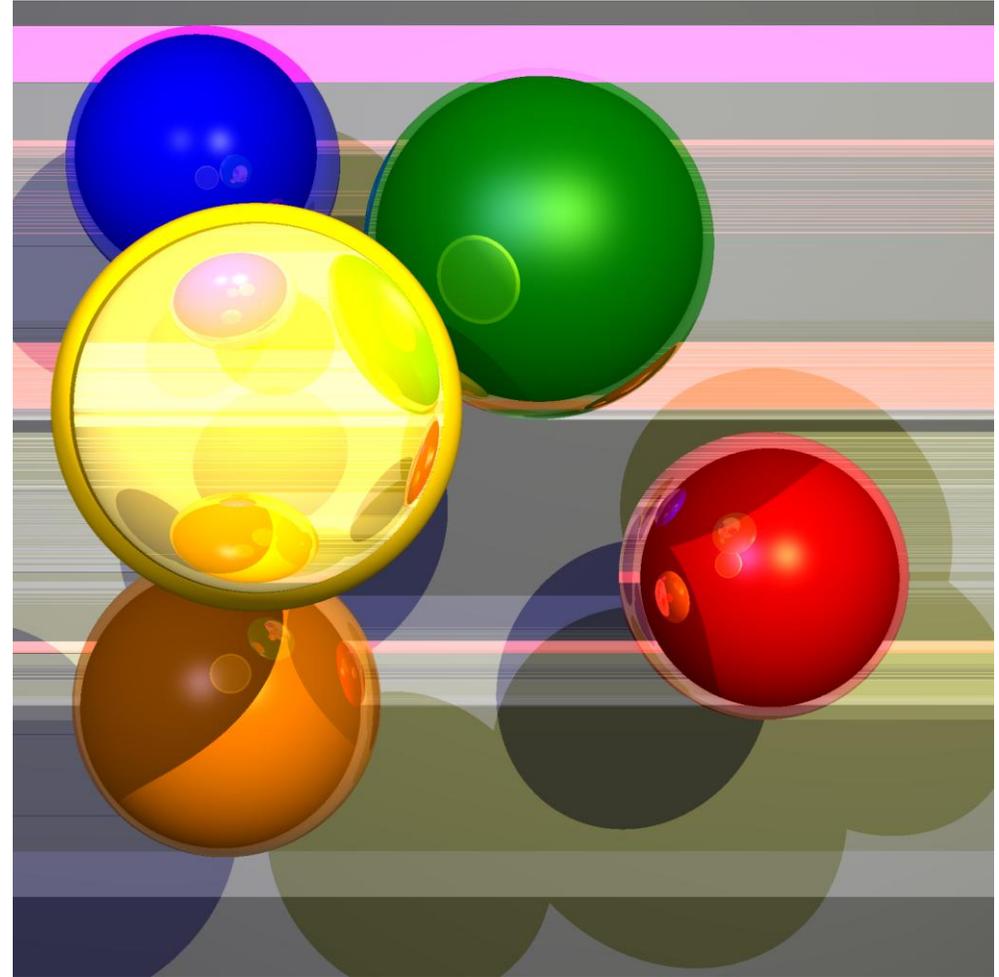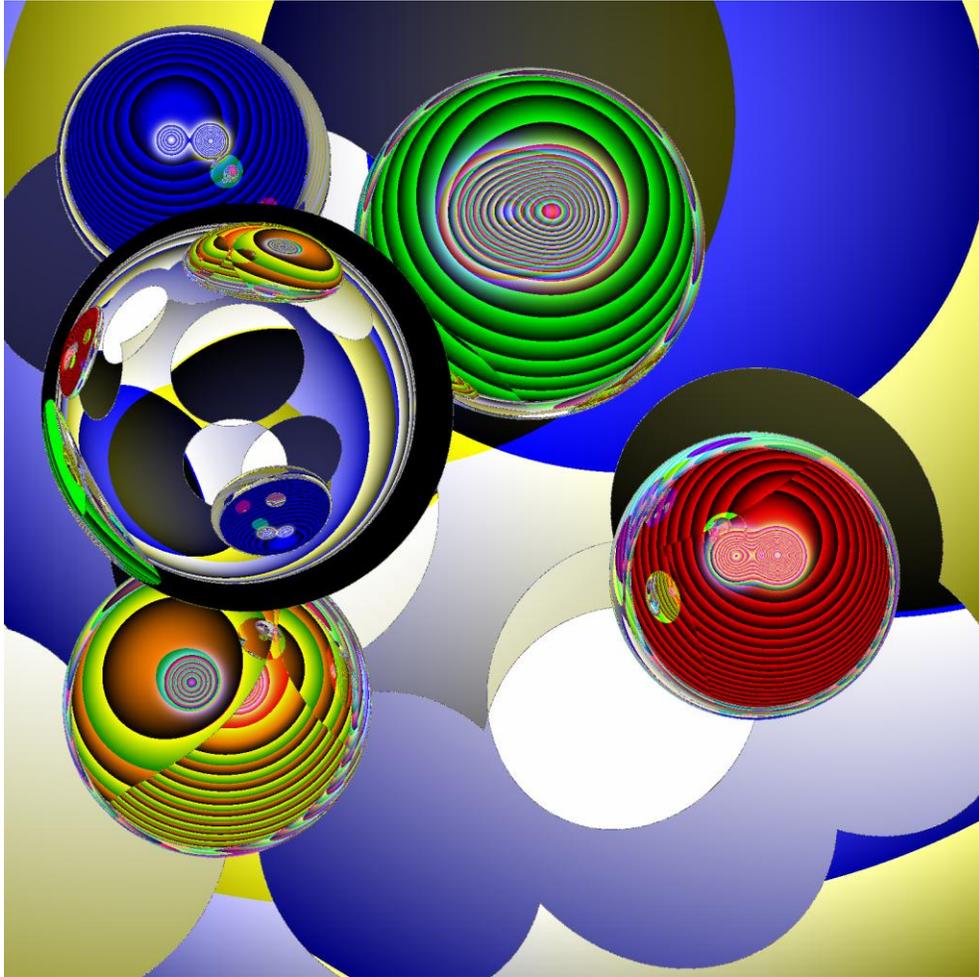
Interesting errors (previous years)
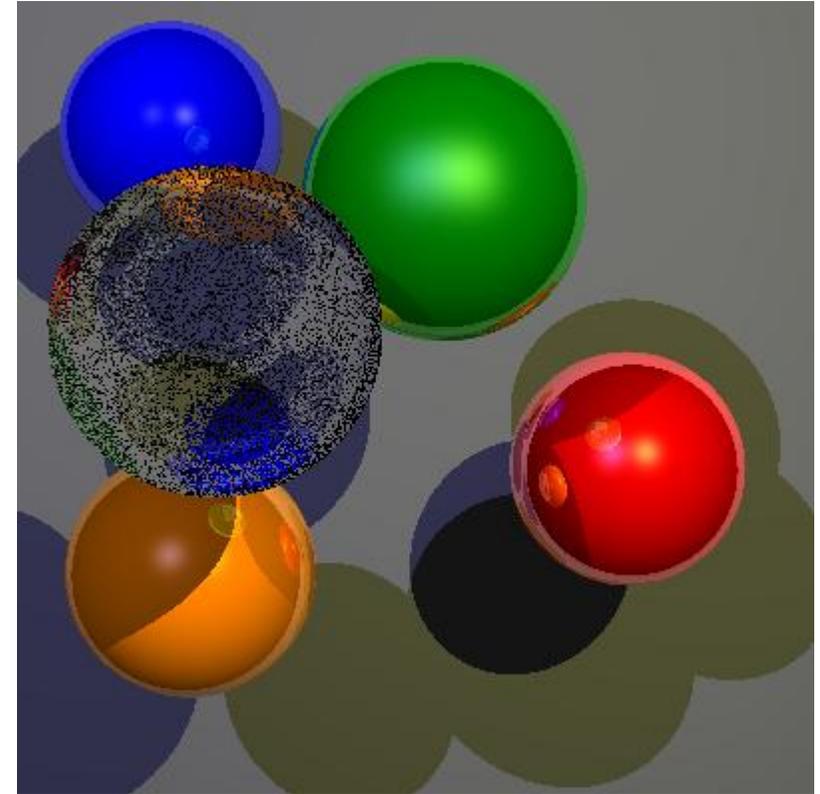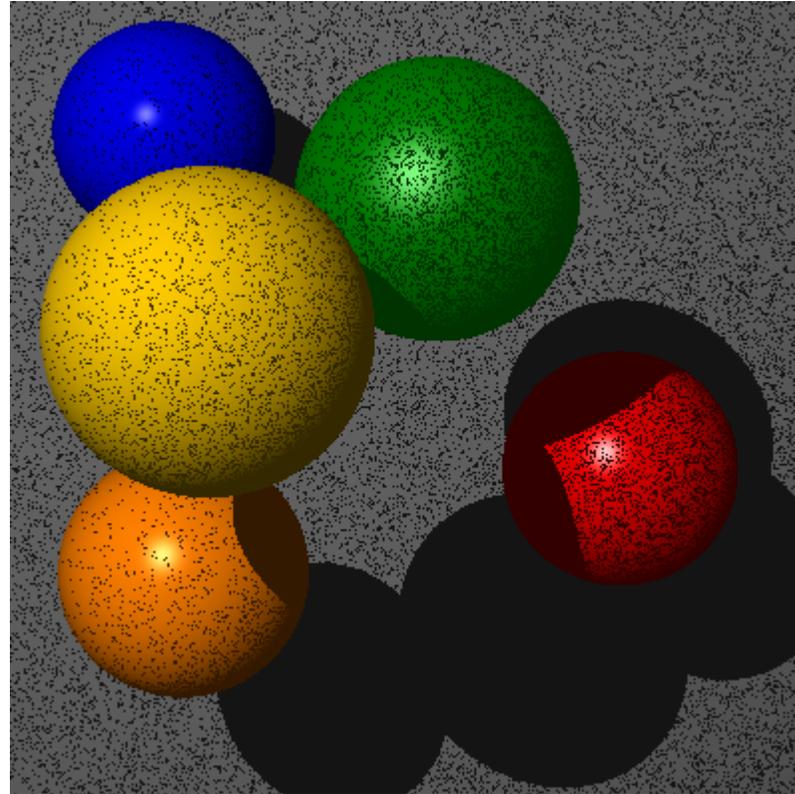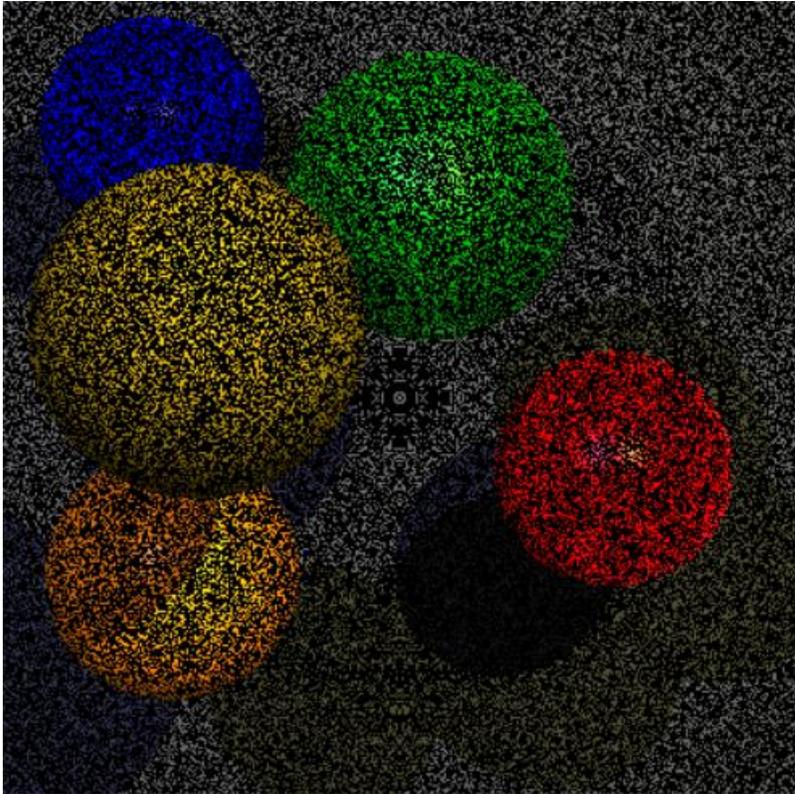
Interesting errors (previous years)
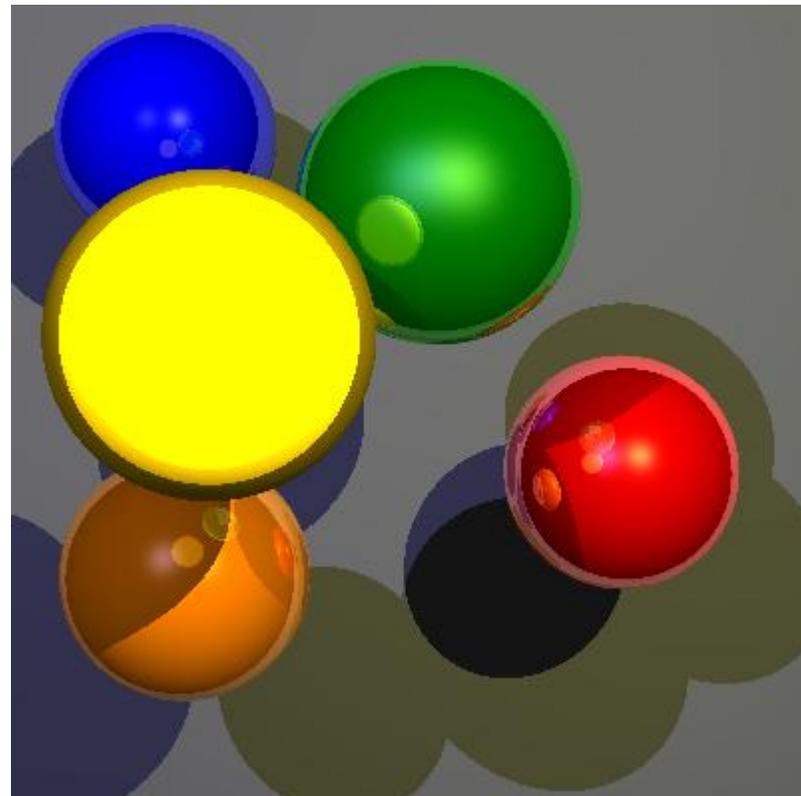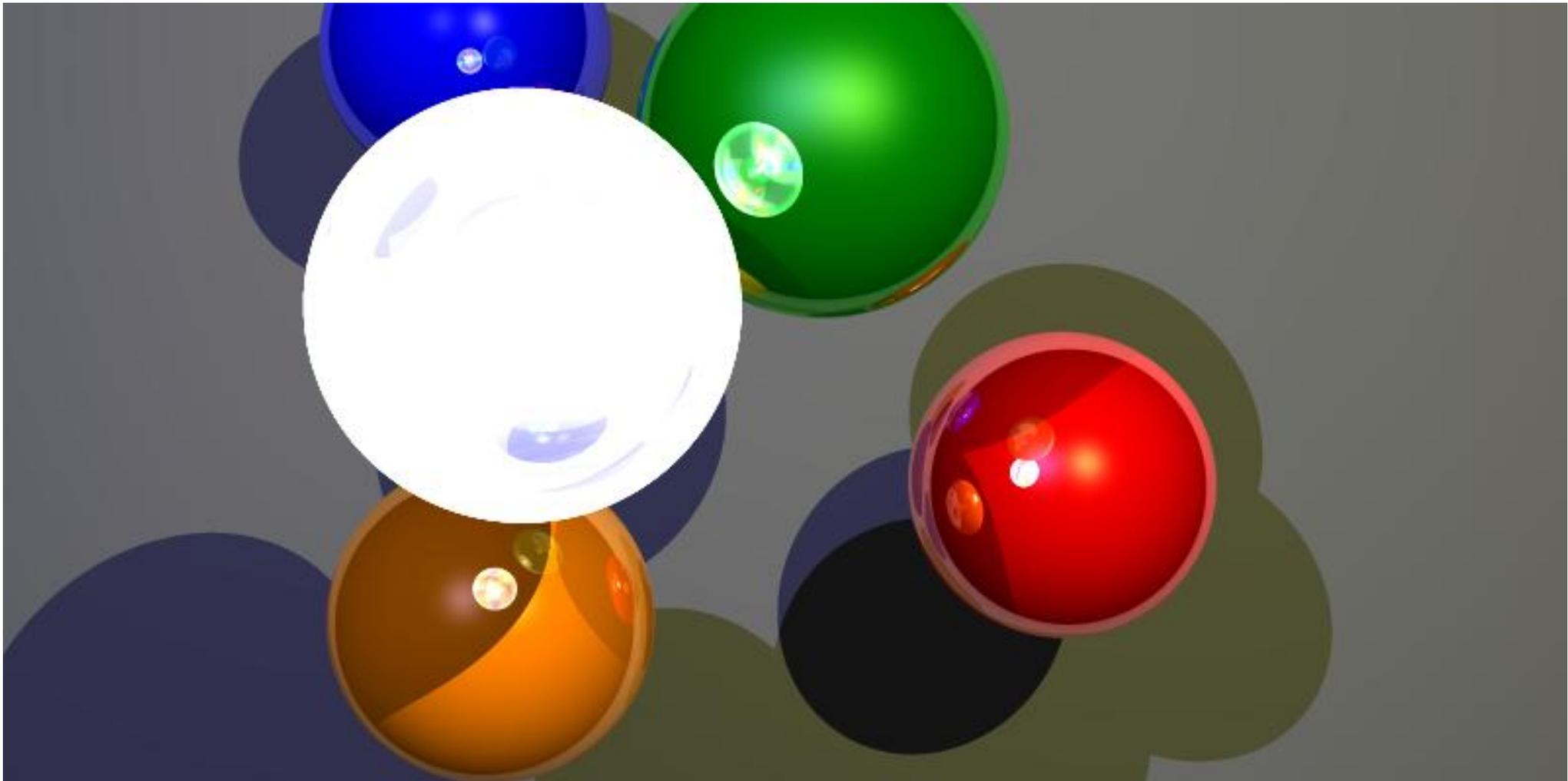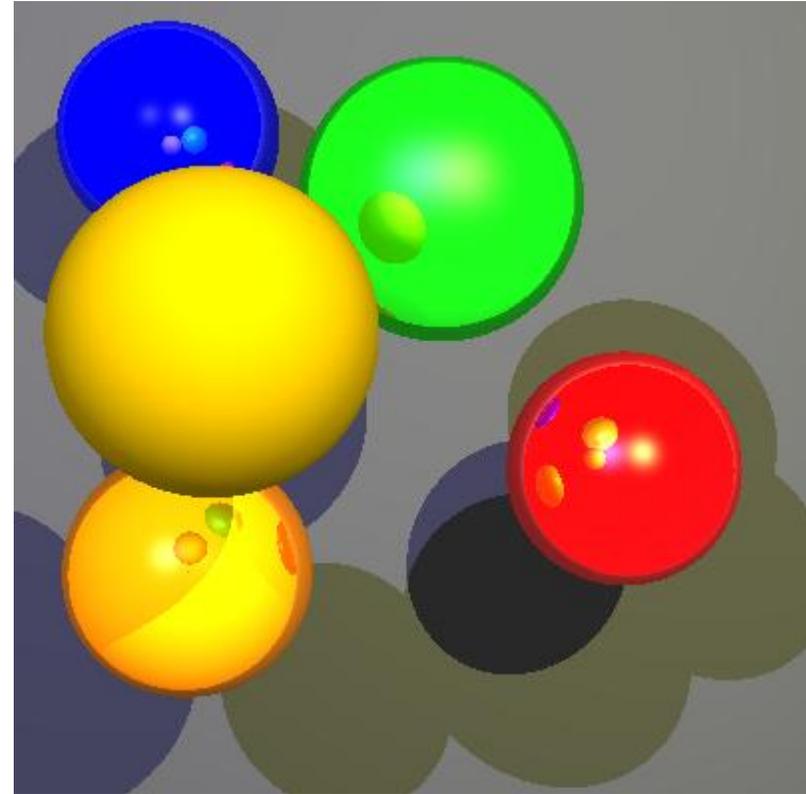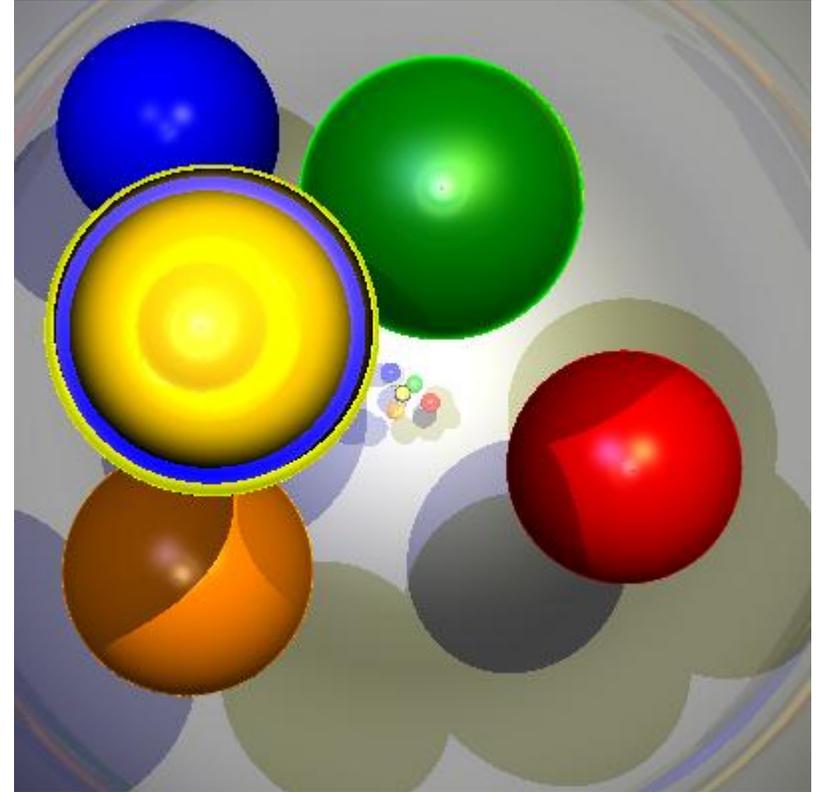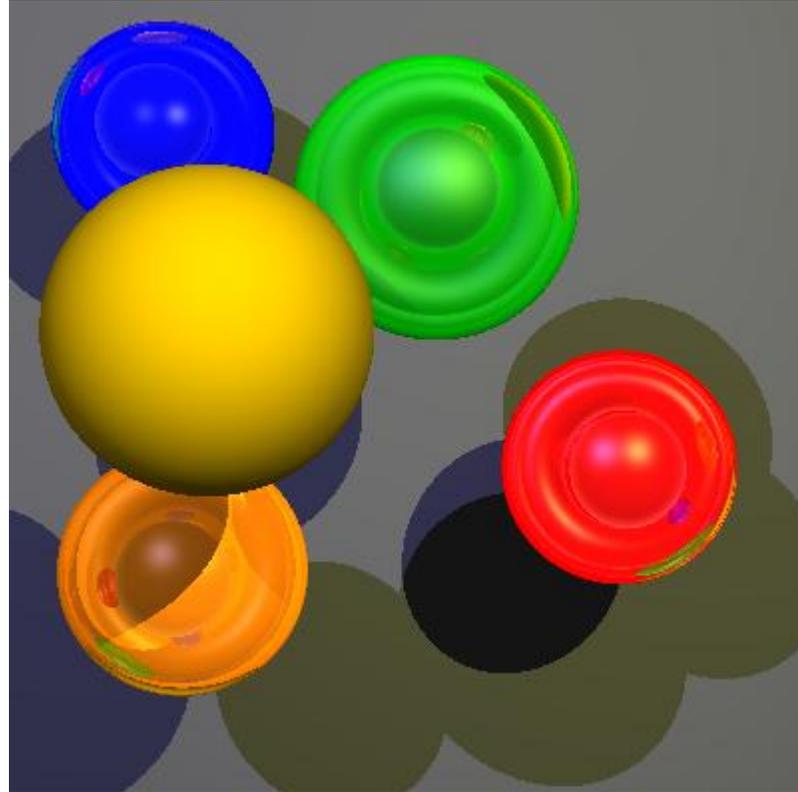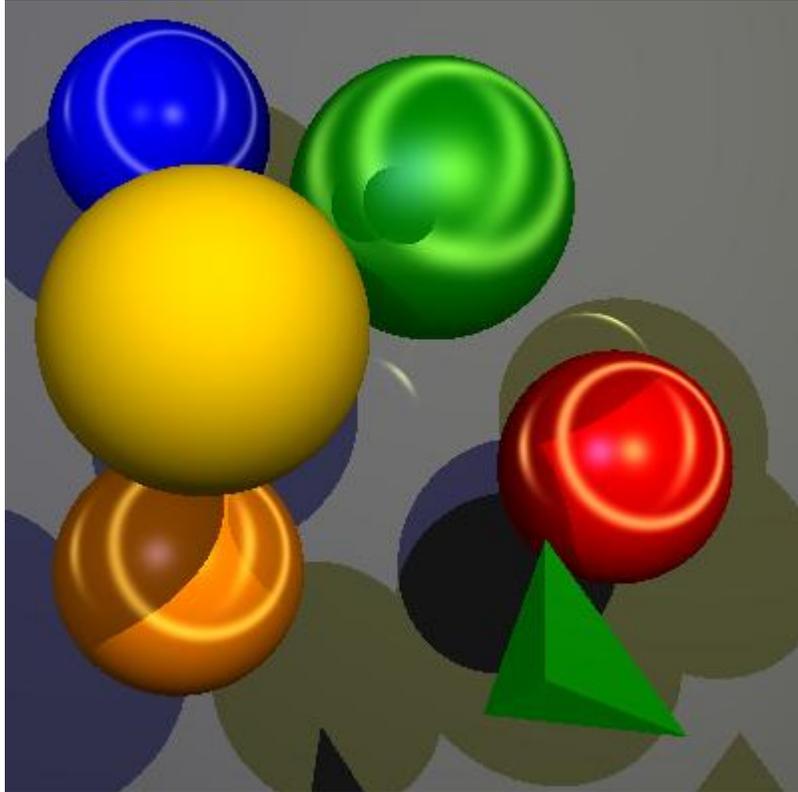
Interesting errors (previous years)
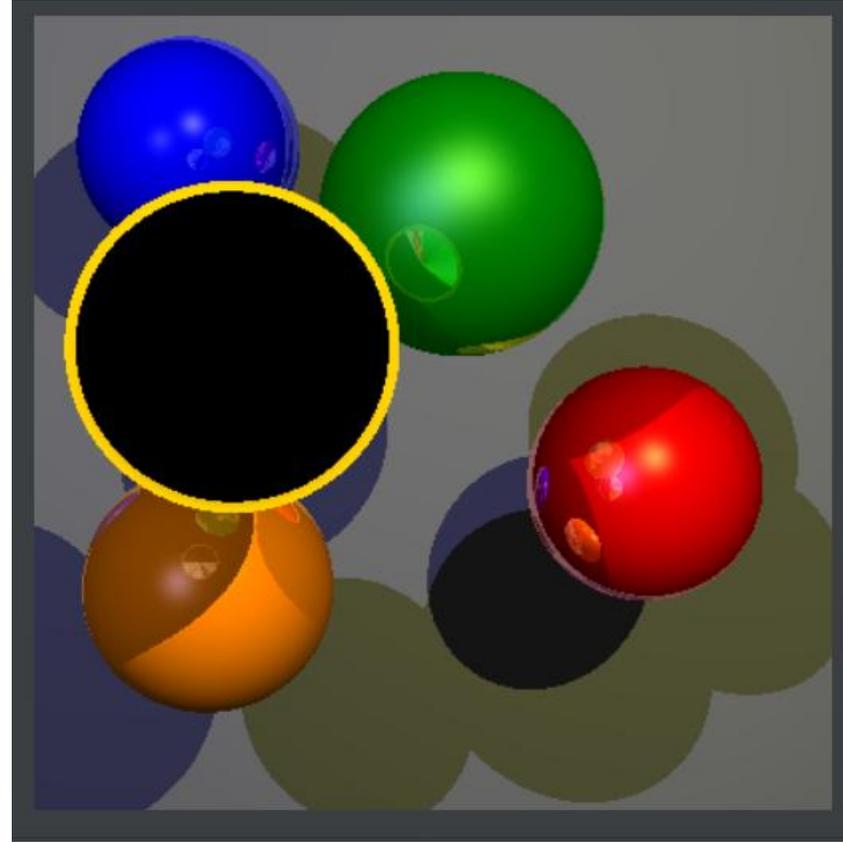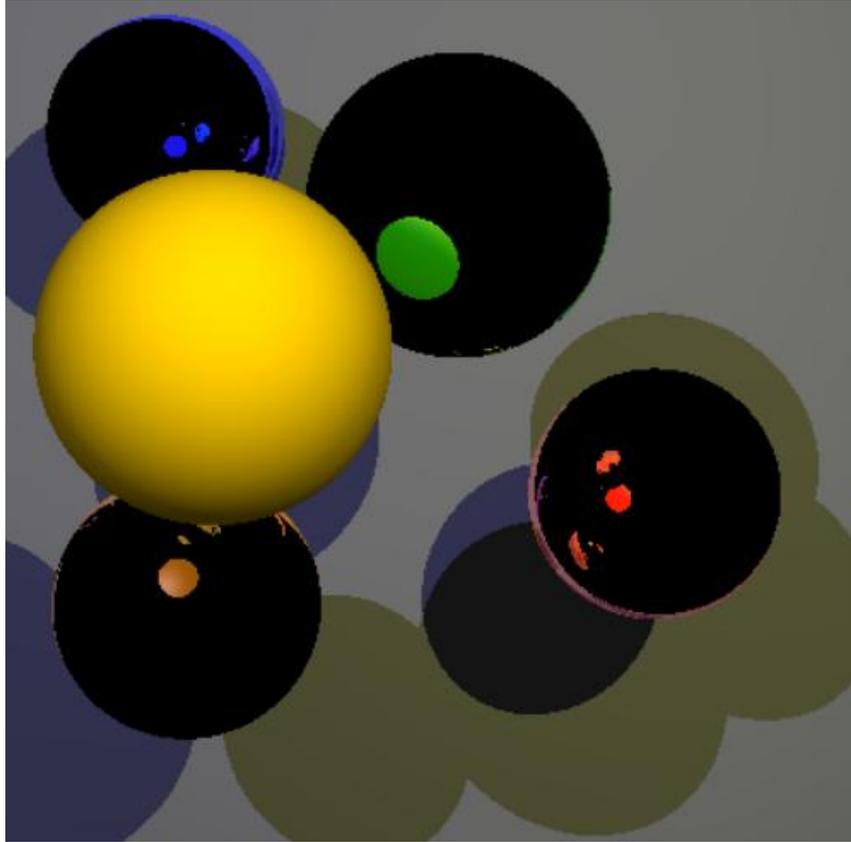
Raytracer: assignment 4 (reminder)

- implement extended camera model
  - eye position
  - reference point (center) as in OpenGL
  - up vector
  - view size
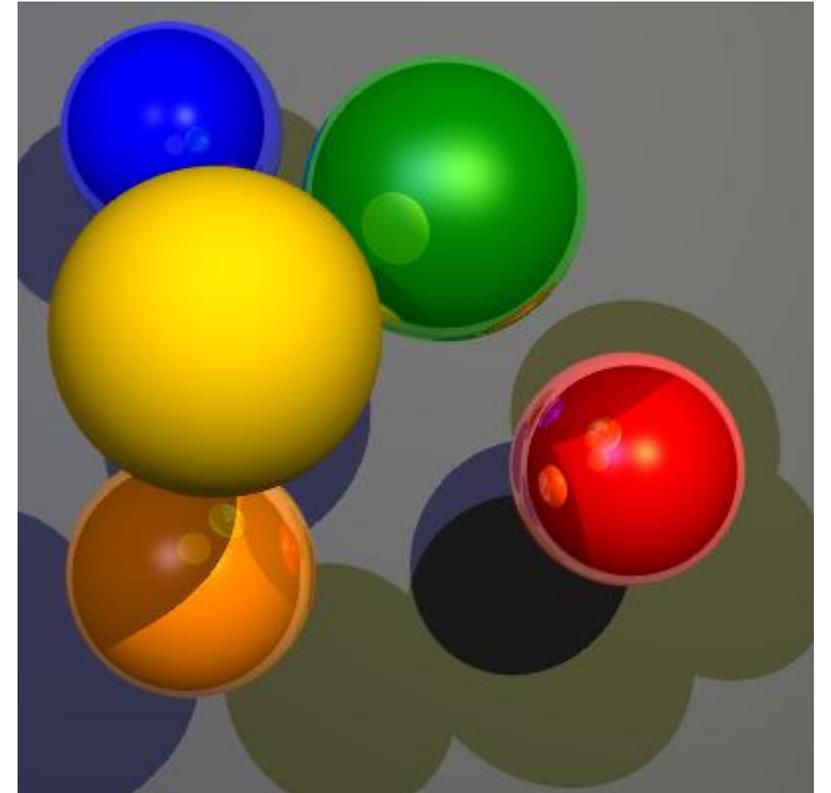
Raytracer: assignment 4 (reminder)

- implement extended camera model
  - eye p
  - refer
  - up ve
  - view
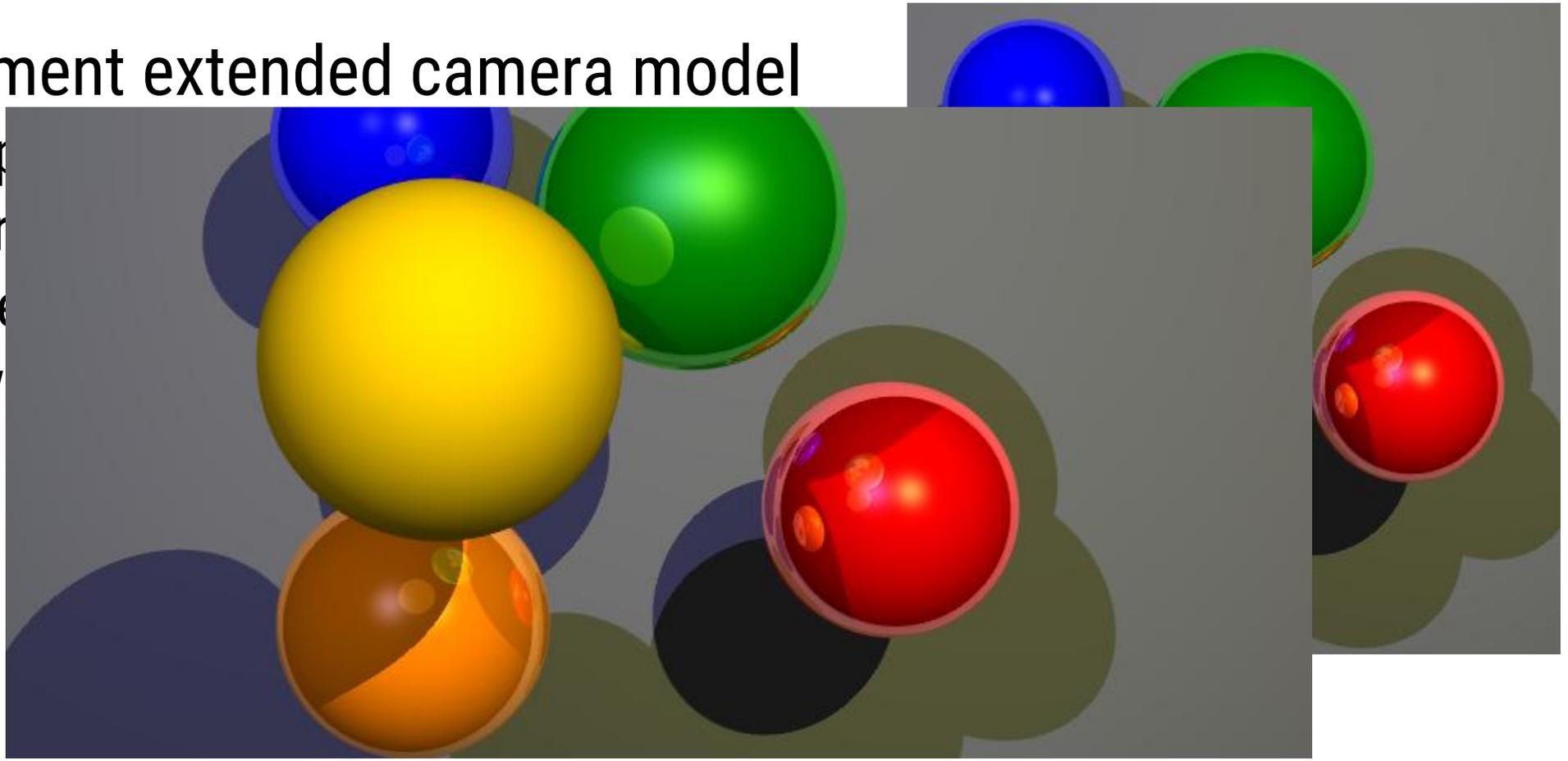
Raytracer: Current camera model
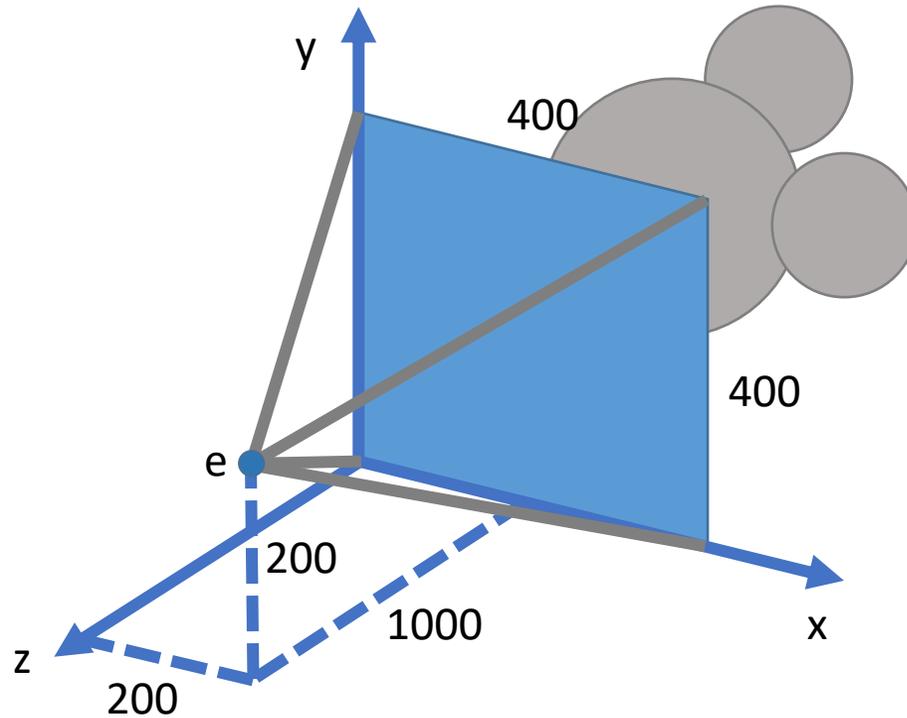
Raytracer: New camera model
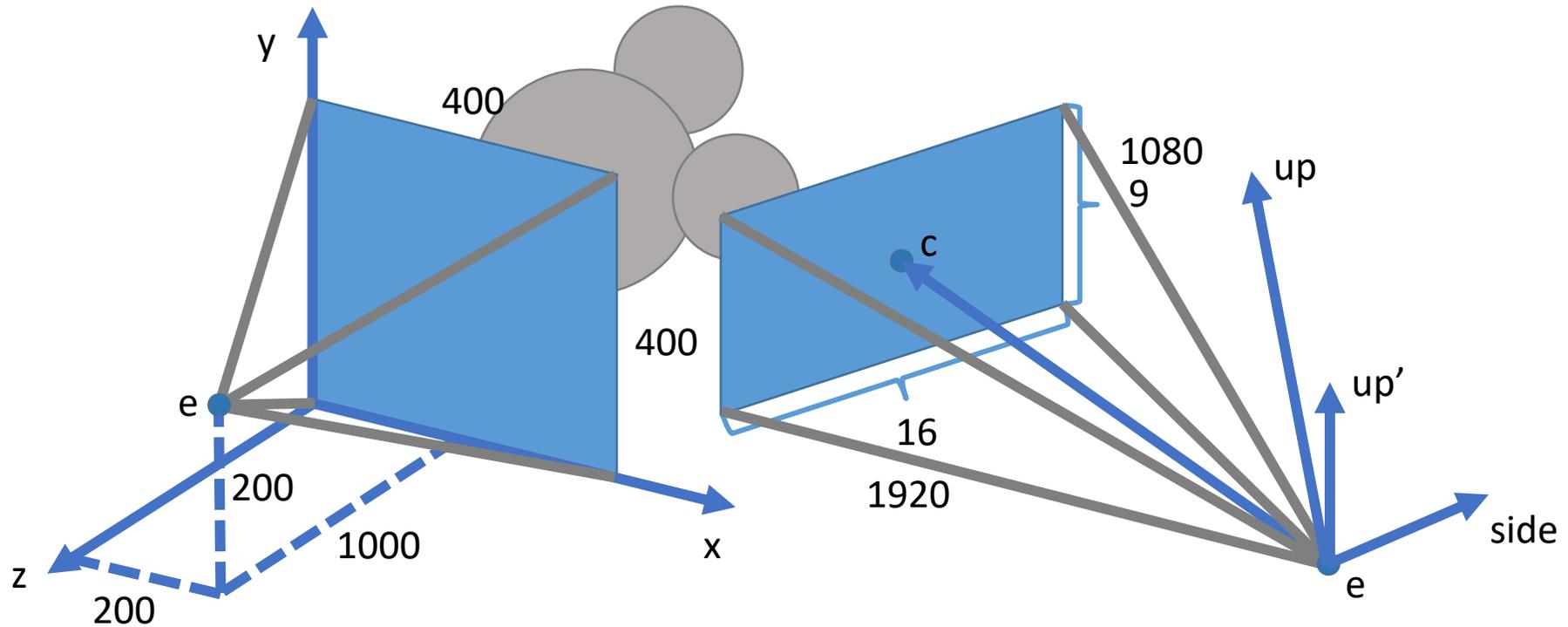
Raytracer: assignment 4 (reminder)

- implement anti-aliasing (super-sampling)
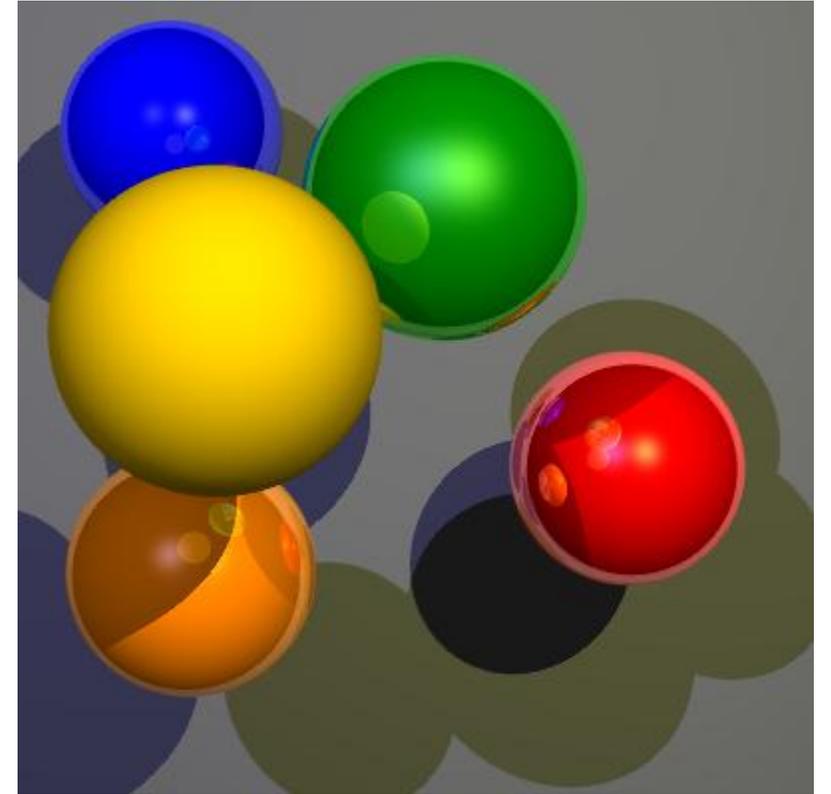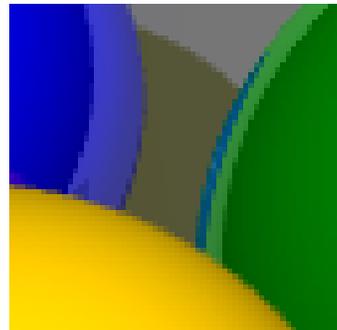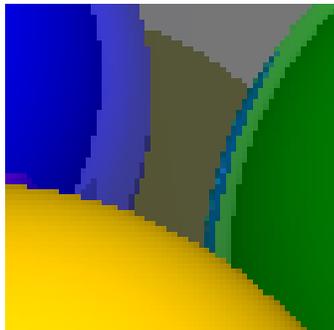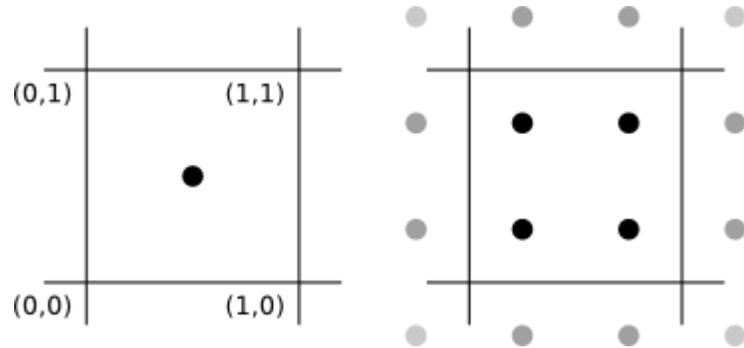
Raytracer: assignment 5

- texture mapping
  - implement texture coordinates

other examples of texture coordinate renderings:
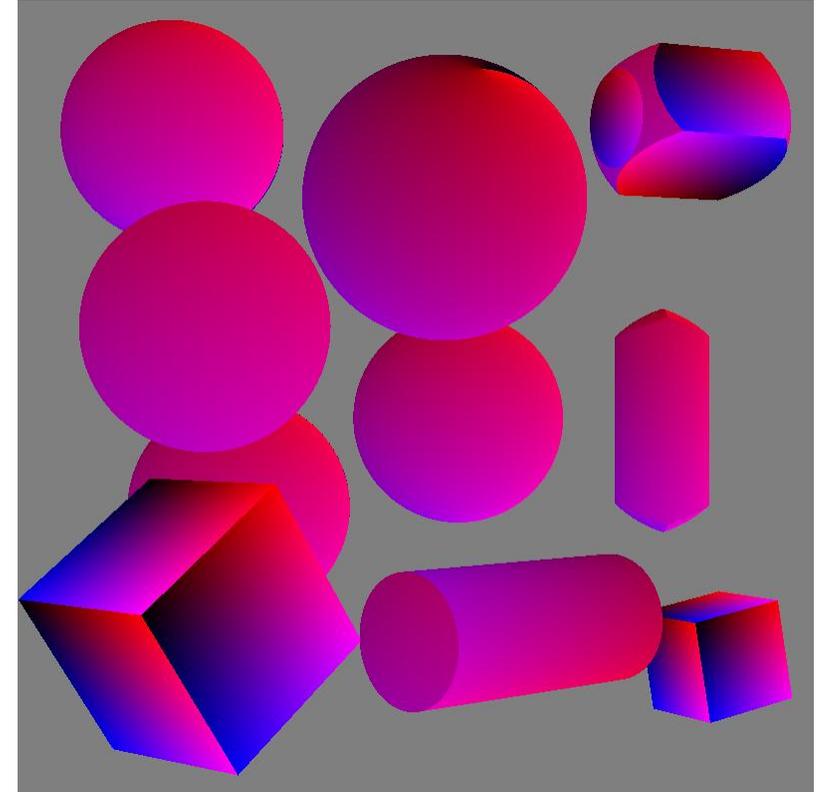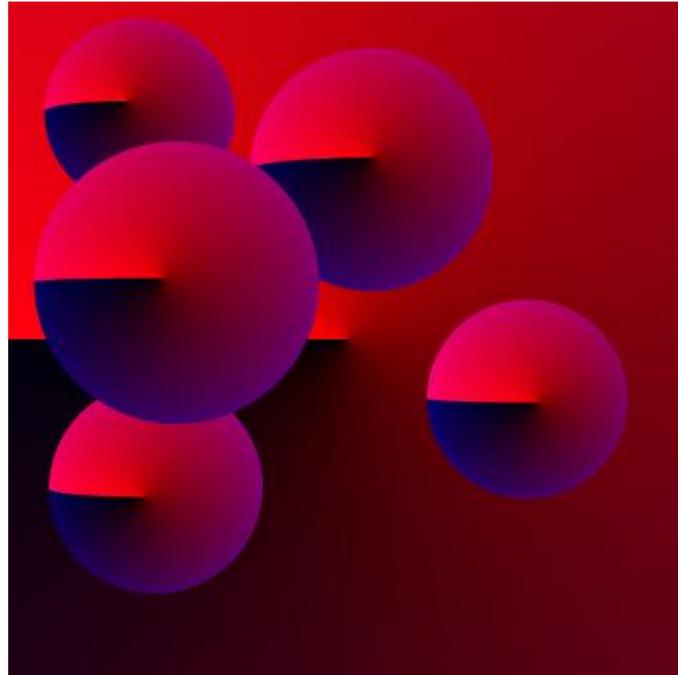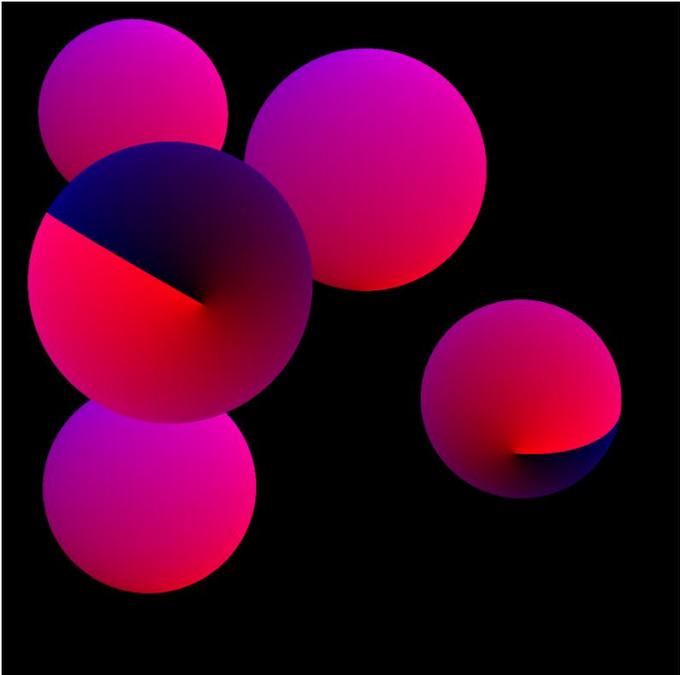
Raytracer: assignment 5

- texture mapping
  - implement (inherent)
    texture coordinates
  - implement texture mapping
    using the inherent texture coordinates
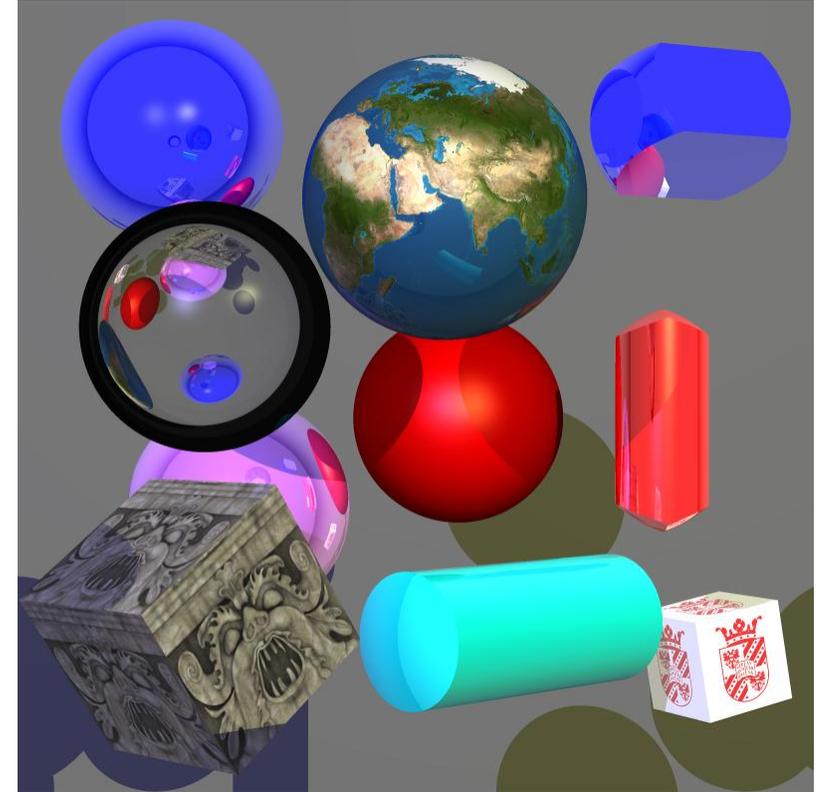
Raytracer: assignment 5

Raytracer: assignment 5

- PLEASE, PLEASE, PLEASE, a renaming of a *.jpg to a *.png does **NOT** turn a JPEG file into a PNG file; it stills starts

  ÿØÿà……..

  while a PNG file should start

  ‰PNG………

- just use proper image conversion (Gimp, ImageMagick, …)

Raytracer: assignment 5

- texture mapping
  - implement (inherent)
    texture coordinates
  - implement texture mapping
    using the inherent texture coordinates

- implement sphere rotation
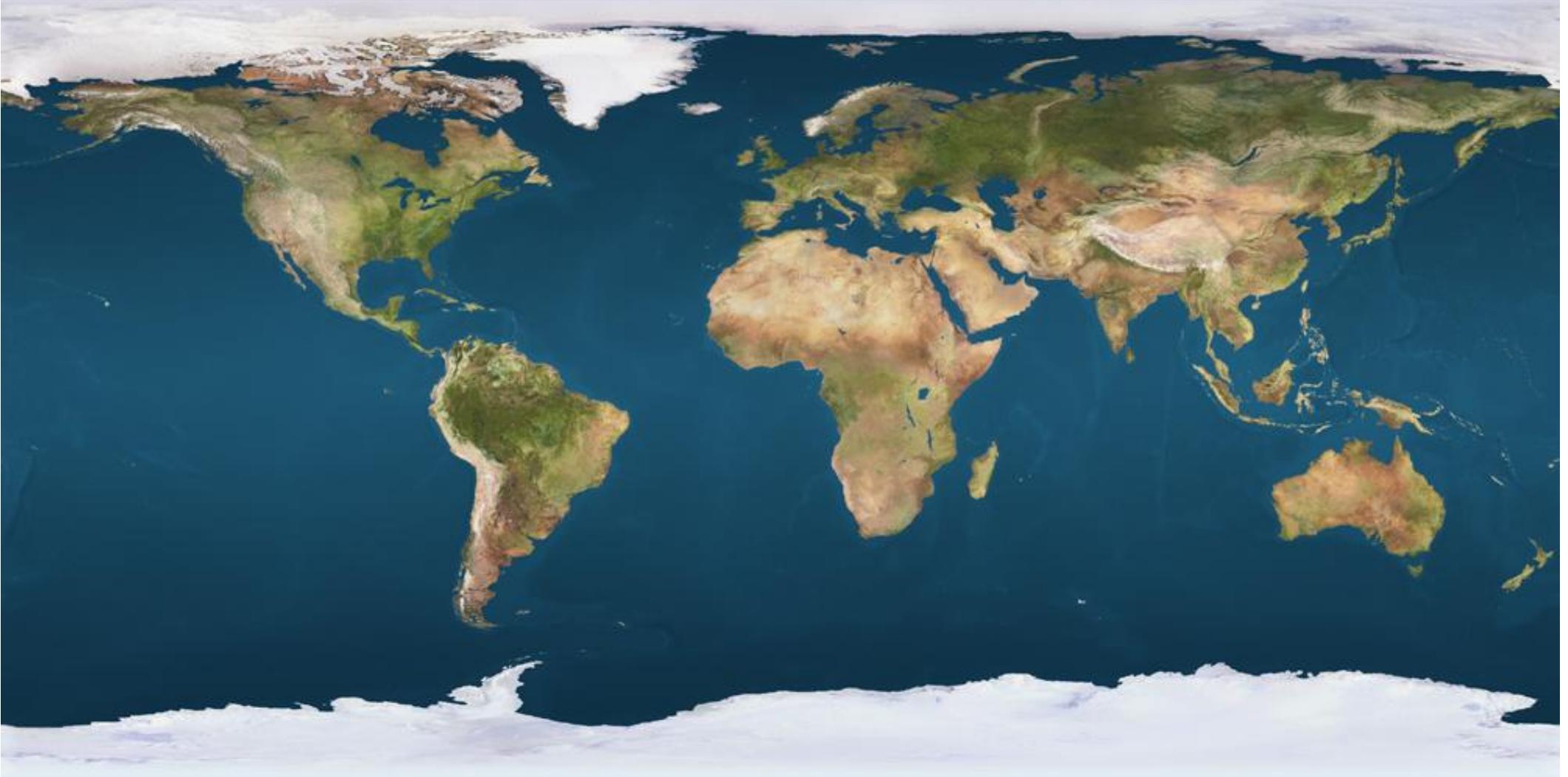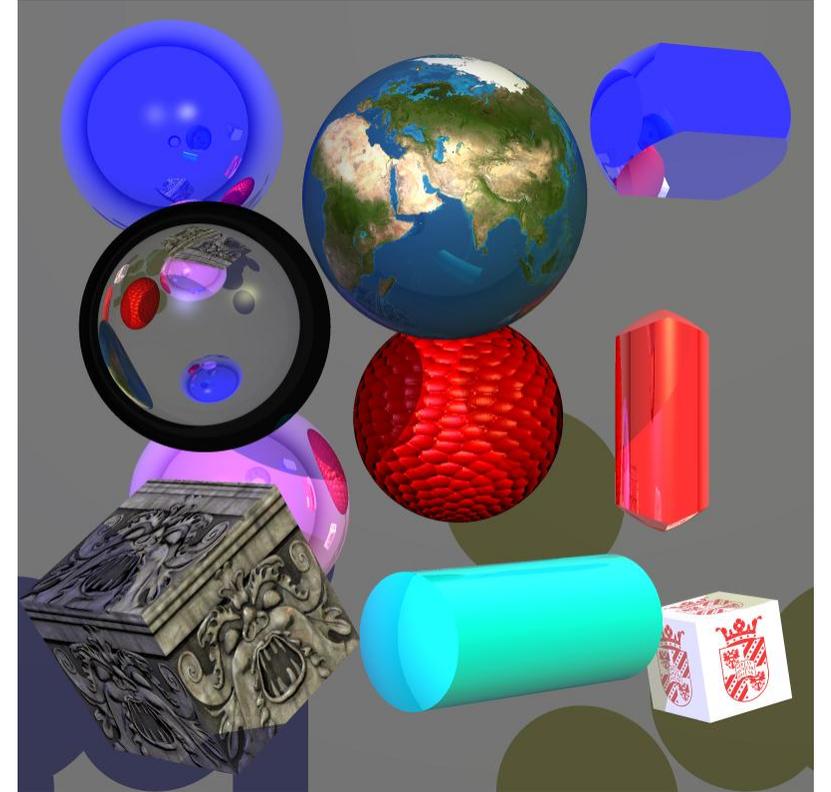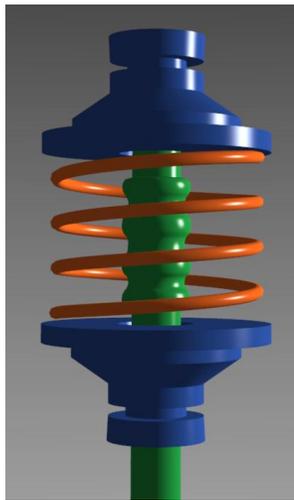
Raytracer: assignment 5

- texture mapping
  - implement (inherent) texture coordinates
  - implement texture mapping using the inherent texture coordinates

- implement sphere rotation
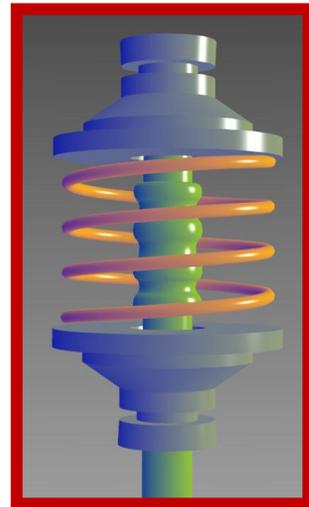
- bonus
  - bump mapping
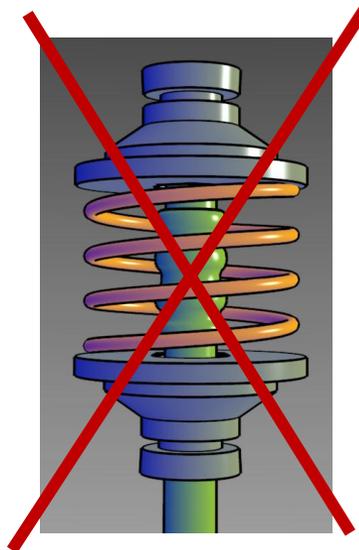
Raytracer: assignment 5

- alternative illumination model
  - Gooch illumination for better illustration of shape
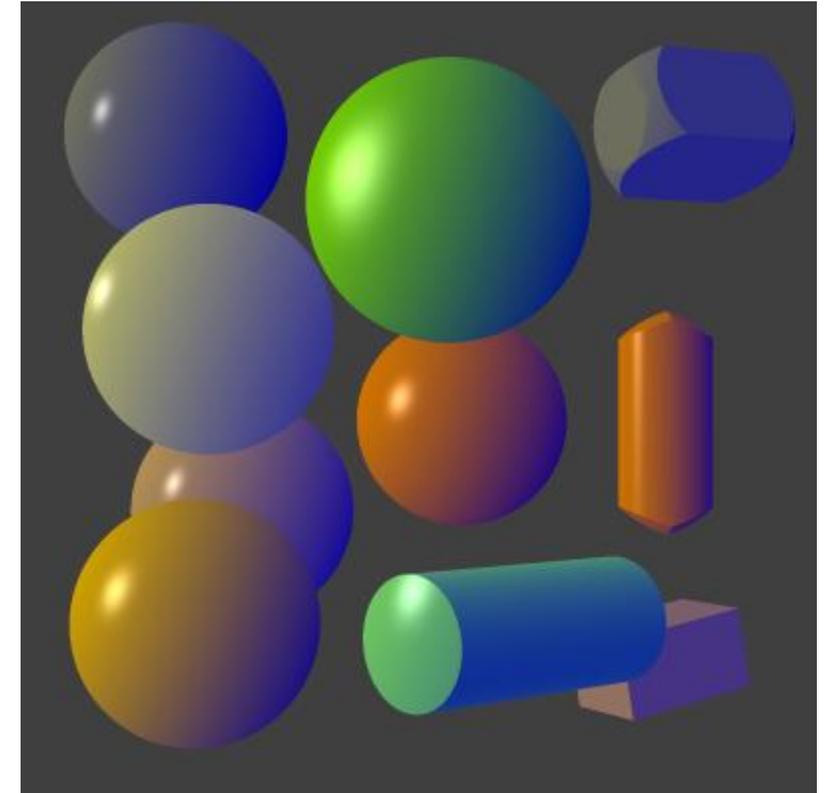   (only cool-to-warm shading, not the outlines)

Phong

Gooch model

Gooch model plus lines

Debugger tutorial