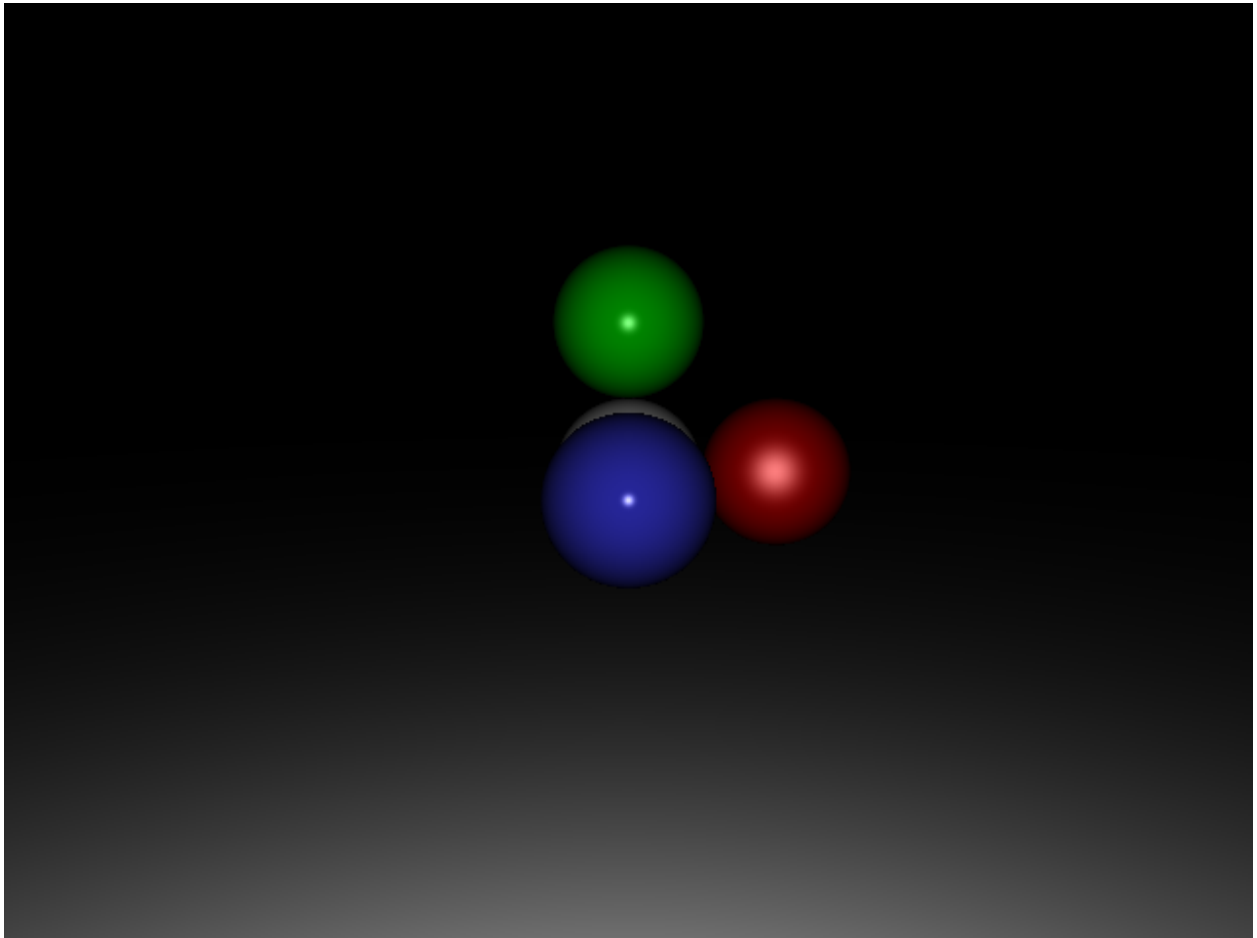


CS130 - Lights

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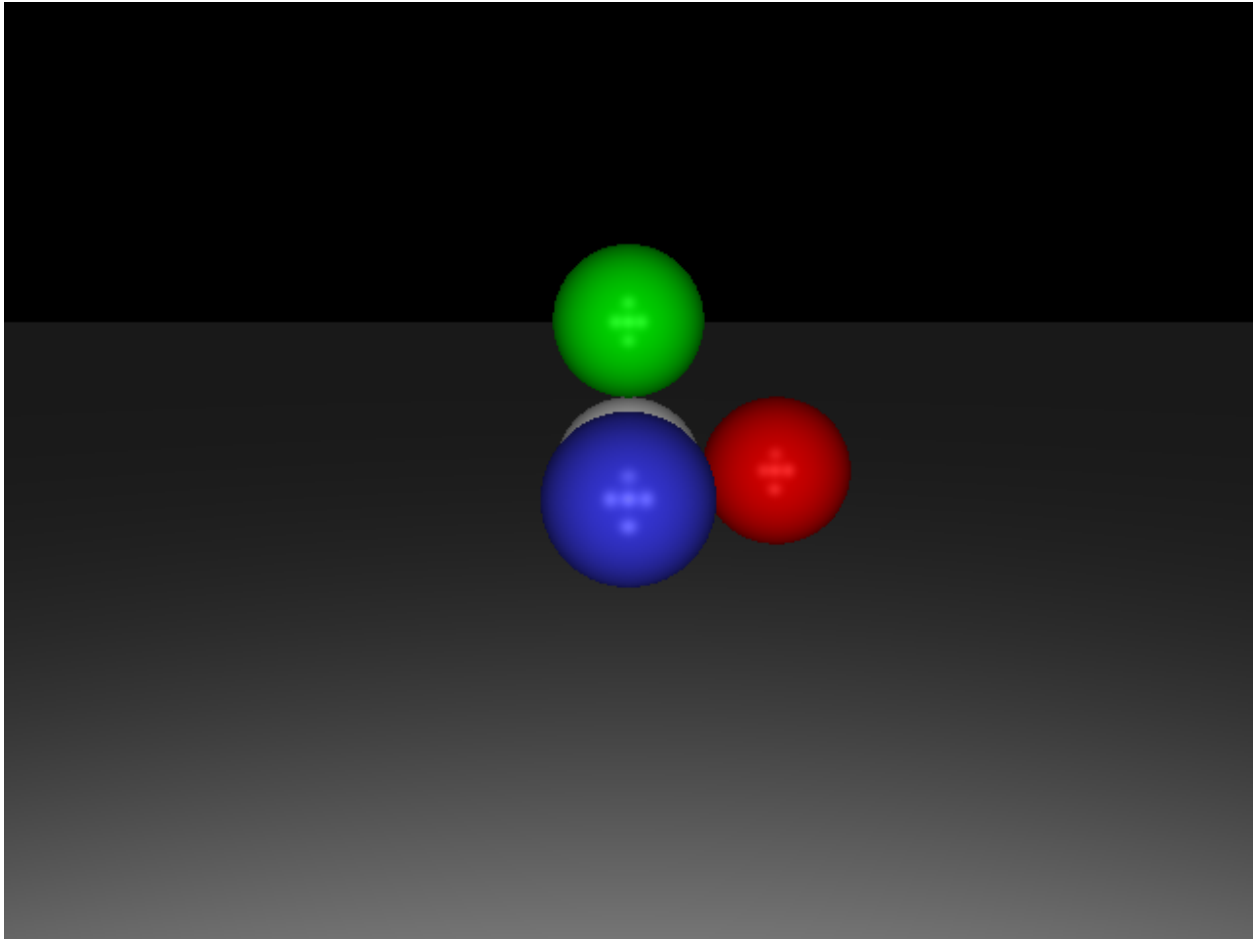
1. Modify test case 9.txt so that it produces the following result:



Change Blue sphere specular power from 50 to 200
OLD: phong_shader blue_shader blue blue white 50
NEW: phong_shader blue_shader blue blue white 200

Change Red sphere specular power from 50 to 5
OLD: phong_shader red_shader red red white 50
NEW: phong_shader red_shader red red white 5

2. Modify test case 9.txt so that it produces the following result:

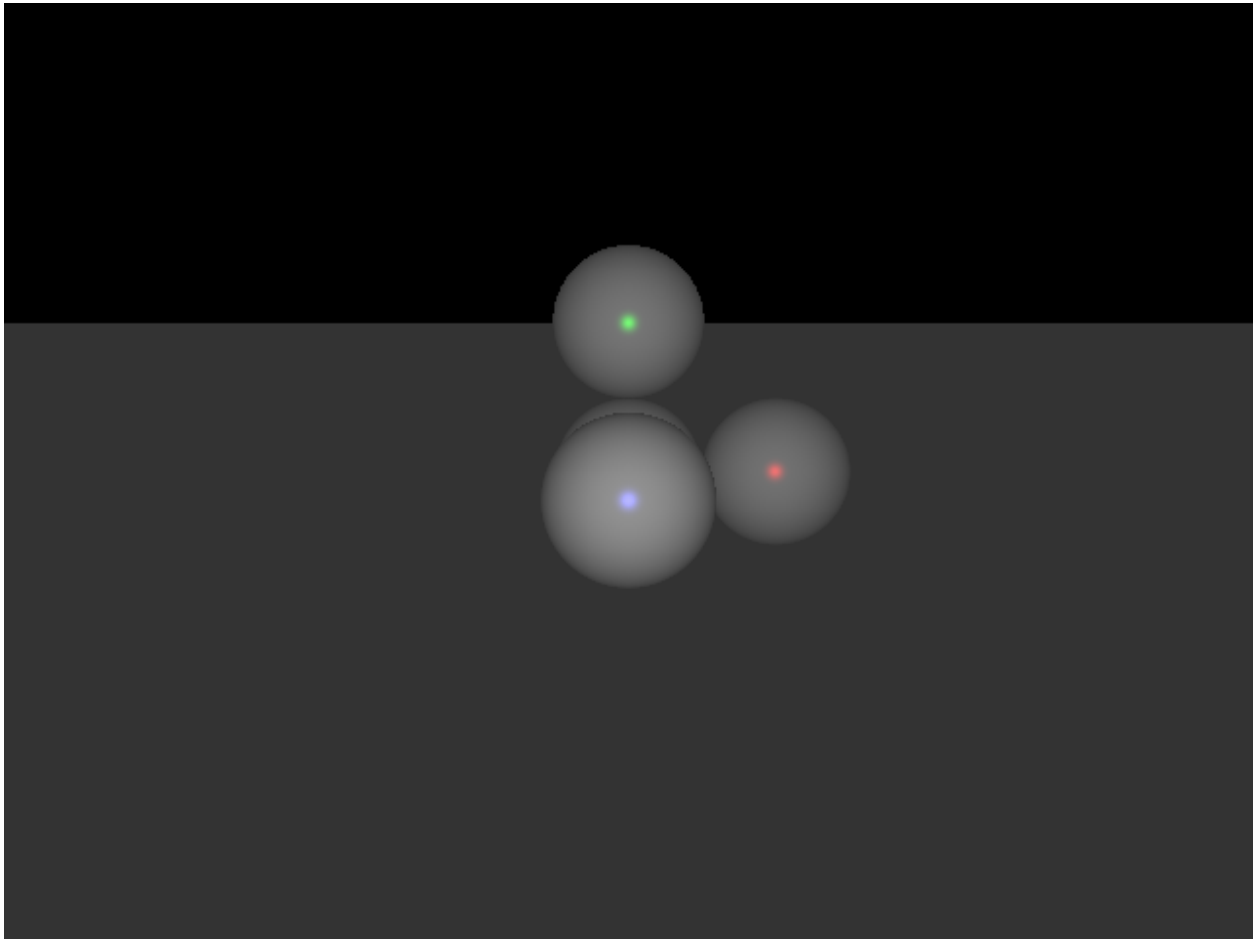


Add 4 point lights flanking the existing, center point light, add white ambient light, and adjust brightness of the point lights.

MODIFIED CODE:

```
point_light L 0 1 6 white 60
point_light L 0 4 6 white 60
point_light L 0 -2 6 white 60
point_light L -2 1 6 white 60
point_light L 2 1 6 white 60
ambient_light white 0.2
```

3. Modify test case 9.txt so that it produces the following result:

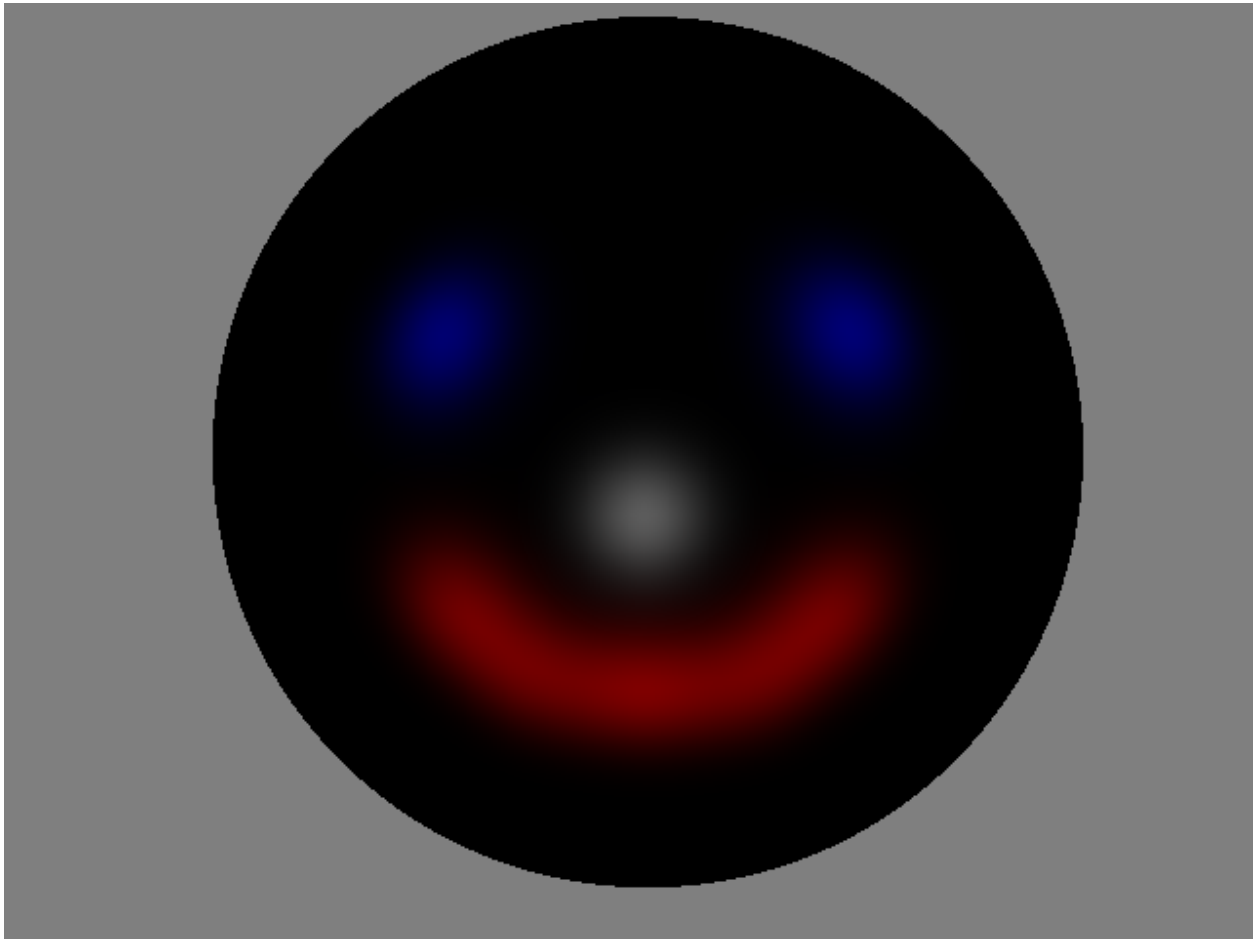


Change Ambient and Diffuse colors of spheres to only show specular colored light. Use flat shader gray color for the plane. Use gray ambient light of modifier 0.4.

MODIFIED CODE:

```
color dark_gray 0.2 0.2 0.2
phong_shader red_shader white gray red 50
phong_shader blue_shader white gray blue 50
phong_shader green_shader white gray green 50
phong_shader white_shader white gray white 50
phong_shader gray_shader white gray gray 50
ambient_light gray 0.4
flat_shader flat_gray dark_gray
plane Pg 0 -1 0 0 1 0
shaded_object Pg flat_gray
```

4. Modify test case 17.txt so that it produces the following result:



Add 6 point lights, 2 for the blue eyes, 1 for the gray nose, and 3 for the red mouth. Decrease specular power from 200 to 20 to get the desired bigger, blurred spots.

MODIFIED CODE:

```
phong_shader shader amb diff spec 20
sphere Ss .1 .1 .3 2.5
shaded_object Ss shader
point_light L0 0 -1 6 gray 100
point_light L1 -5 3 6 blue 200
point_light L2 5 3 6 blue 200
point_light L3 -5 -4 6 red 200
point_light L4 5 -4 6 red 200
point_light L5 -3 -6 6 red 200
point_light L6 3 -6 6 red 200
point_light L7 0 -6 6 red 200
```