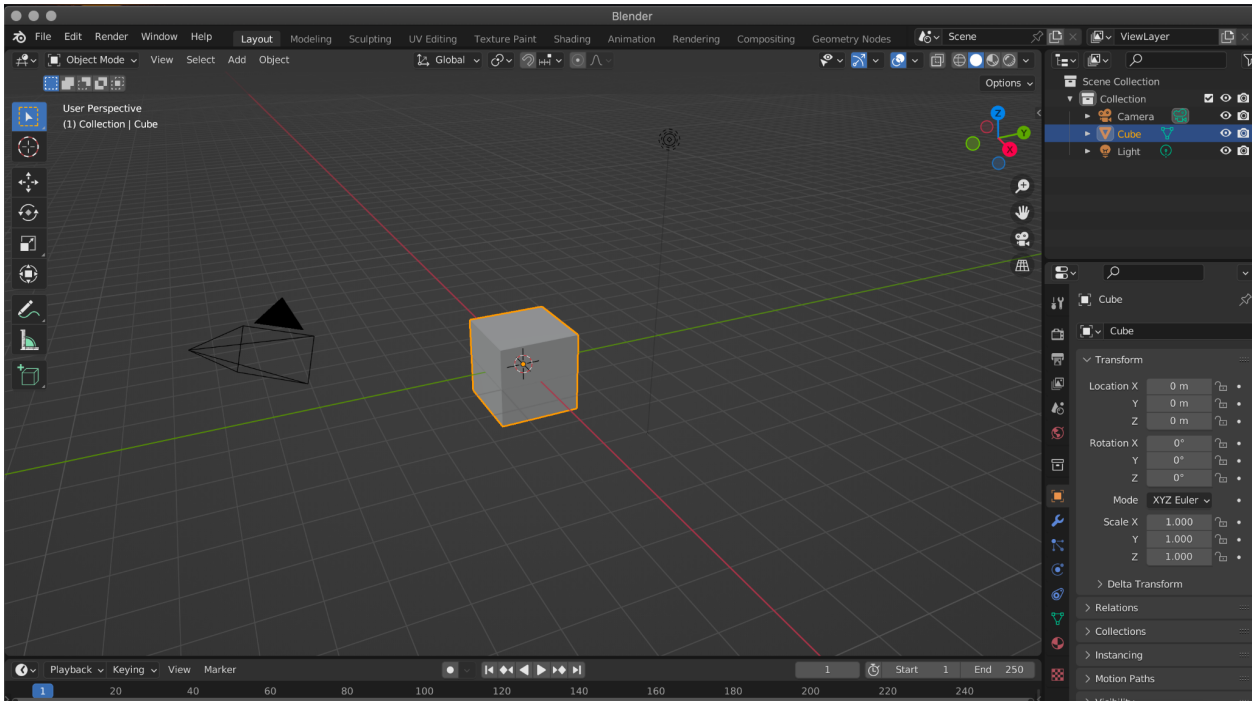
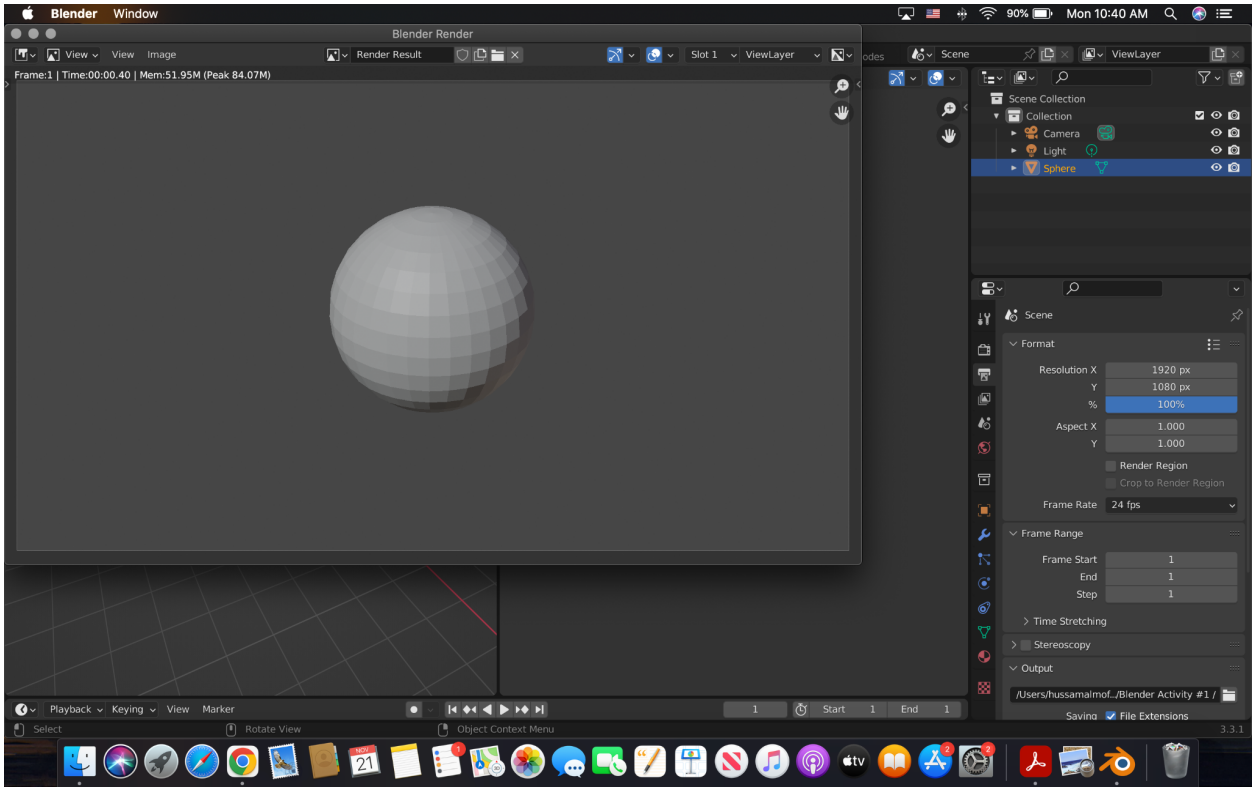
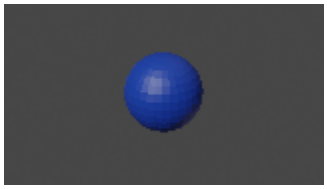
Checkpoint 0:



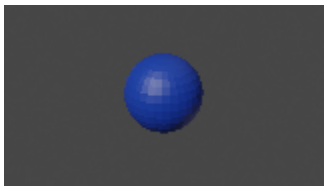
Checkpoint 1:



Checkpoint 2:

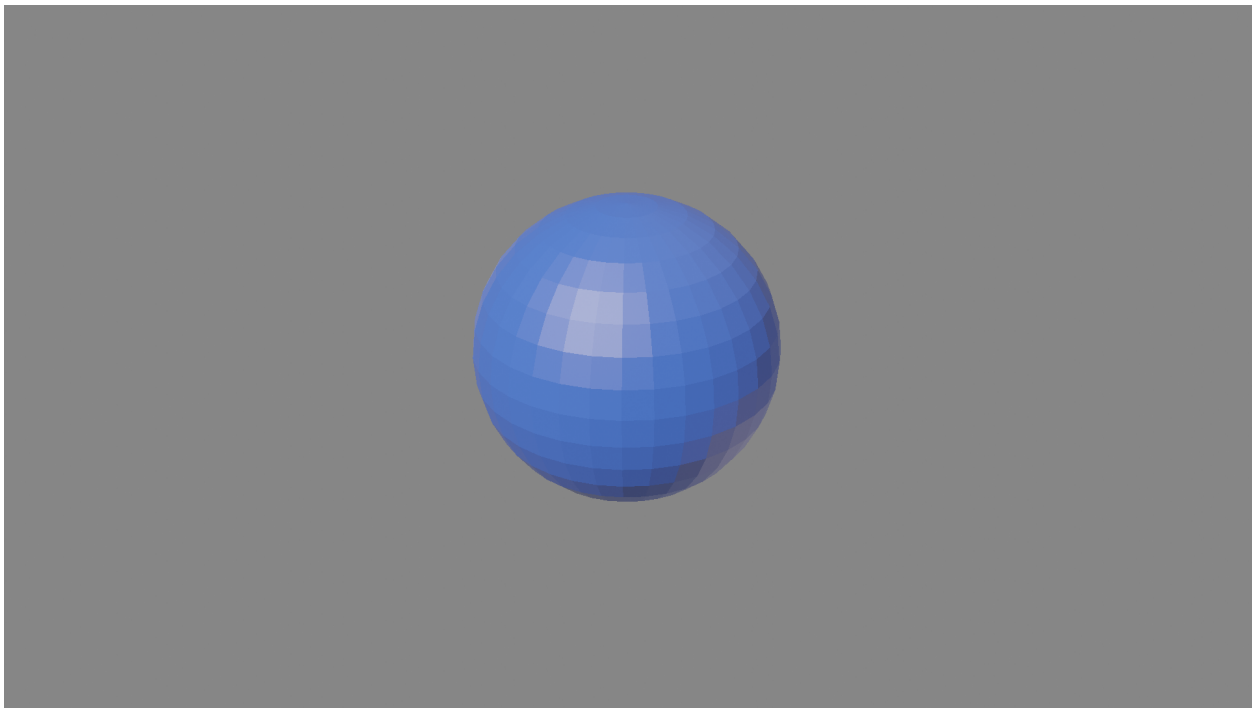


Checkpoint 3:



Checkpoint 4:
I cannot see much difference between the two images; maybe I did this wrong?

Checkpoint 5:



Checkpoint 6:
Much higher quality between the two images and the difference is clear.

How does light interact differently with different objects in real life?
1- Light waves could be absorbed by the object.
2- Light waves could be reflected by the object.
3- Light waves could be transmitted by the object.

Why do objects appear to have different colors to our eyes?
Because they absorb some colors (wavelengths) and reflect other colors.

What is the advantage of using YUV color space?
Mainly, it is more efficient.

How are colors added differently for lights compared to paint? What does R + G + B equal to in each case?
For paint: Added color = darken the color.
For light: Added color = Brighten the color.
RGB: They are 8 bits each.

Why are green screens green?
Because green is not something that is in our skin; nothing in the object that is in front of the camera is green unless it is desired to be that way. In other words, green is a color we can control.

Why is tone mapping needed for HDR images?
To reveal the full details and give a realistic look.

Why is the wavelength of 700nm associated with red and 400 nm associated with purple?
Because light toward the red end of the spectrum has longer wavelengths and lower energy, hence the red color. However, the light toward the purple end of the spectrum has a shorter wavelength and higher energy, hence, the purple color.