This challenge is simple (to write). Modify the photometry notebook you worked on to obtain photometry on the new images of NGC 7331 you got from the image reduction module. You will need to run astrometry.net on the image to obtain absolute astrometry on this image.

With B, V, and R magnitudes for all stars in the field, we will make an observational version of the famous [Hertzprung-Russell diagram](https://en.wikipedia.org/wiki/Hertzsprung%E2%80%93Russell_diagram). The observational version we will make is called the color-magnitude diagram. As the name suggests, it’s a plot of color (say B-V) on the y axis and one of the magnitudes (usually the redder one) on the x axis. For this challenge, let’s plot (B-V) and V.