#### In this project, we will be doing a classification of star types, determine the whether a star is Red Dwarf, Brown Dwarf, White Dwarf, Main Sequence, Super Giants or Hyper Giants according to the temperature and the absolute magnitude. Absolute magnitude (M) is a measure of the luminosity of a celestial object, it measures the star’s luminosity at a distance of 32.6 light years to make sure the result is standard. From Red Dwarf to Hyper Giants, the energy inside the star raise up. Each type of of star has its own specific properties in range of temperature and range of absolute magnitude. We want to study how to use these two range of star properties to predict what type a star would be. We will be using a dataset from kaggle, the name of the dataset is “Star Type Classification / NASA”. There are 240 observations in the dataset, 5 quantitative variable and 2 qualitative variable, we will choose temperature and absolute magnitude as our predicting variable, to predict the star type.