STARFISH SCHOOL

A Virtual Bootcamp for Astronomy Graduate Students

WEEK 2 EXERCISES (GROUP)

Version 1.0

Group Exercise

1. **In Python**

   a. Read in the data from the data file A provided

   b. Change the precision of the data file (reduce the floating point precision to 1 decimal place, or make them integers)

   c. Apply a 50% Gaussian scatter to the data points

   d. Make a plot of your data and save it to file B

   e. Save the data to a text file

2. **In R**

   a. Read in that text file B that you saved in the step above

   b. Compute the summary statistics of the data

   c. Plot the data

   d. Plot the five number summary statistics (hint: look up `?boxplot`)

   e. Read in the original data file A used in the step above

   f. Compare the summary statistics of the A data with the B data

   g. Make a plot and save it to file

   h. Save original data A to file with increased precision