Homework 6

Due April 26, 2023

Problem 1

Get the Sloan Digital Sky Survey data from https://www.stat.cmu.edu/larry/all-of-nonpar/data.html Investigate the distribution of redshifts using a histogram and a kernel density estimator. Use least squares cross-validation to choose the amount of smoothing. Also consider the Normal reference rule for picking a bandwidth for the kernel. Plot the graphs of the estimated densities. Carefully read example 4.3 from the textbook.