

Description: In these projects we will apply what we've learned in class to real-world datasets for analysis.

Tasks:

1. Using the **wine.csv** file provided in the datasets zip file, create a model of the data using penalized regression (ignore high quality and color and the first column which is an index) to predict the quality variable. You may use a built-in package function for one model, and use a custom function for one other model. Compare the results.
2. Using the **50_AdAgency.csv** file provided in the datasets zip file, create a spline regression model of profit predicted with one of the expense columns (your choice). Test for the optimal number of knots in your model.

Submission: Write up a work document describing your code and the results obtained. Include with your submission your R code file.