Capstone Project:

All projects are based on police cancel information for car/home insurance sales.

1. Cancel Prediction at Lead Purchase:
   1. Problem: As an insurance company buys leads to try to sell policies, it is important those leads are likely to lead to revenue for the company. When someone buys a policy and cancels, that revenue is lost. If it were possible to know who is most likely to cancel when leads are purchased, the agency could avoid buying leads for the customers that would be most likely to cancel. This would lead to more revenue for the company.
   2. Data will be information known about each lead at time of purchase, included variables such as:
      1. Credit
      2. Accident history
      3. Education
      4. Etc.
   3. This would be examining cancel as a categorical (yes/no) variable.
2. Cancel Revenue Prediction at Lead Purchase
   1. Problem: Same as above.
   2. Data: Same as above.
   3. Instead of examining cancel as a yes or no, I would be examining it in terms of revenue lost (continuous variable).
3. Cancels after Purchase:
   1. Problem: After purchase, there are a lot of insurance policies that cancel due to non-payment. It has been found in the past that establishing contact with customers increases their likelihood to pay. If we could identify those customers mostly likely to cancel due to non-payment, we could establish communication with them earlier. This would decrease cancels due to non-payment and increase revenue.
   2. Data: Combine the data in the problems above with after purchase data including same day vs. follow-up purchase, day of week of purchase, how long since purchase, etc.
   3. The dependent variable in this case would be a categorical variable (cancellation due to non-payment = yes or no).