**Trupanion Data Scientist Candidate Homework**

Part 1:

As an insurance company, we collect premium on a monthly basis from customers. In return, we pay the customer’s veterinary bills should their pets receive medical treatment.

How would you estimate the remaining “value” of a customer (total premium collected minus total costs)?

How could we as a company use this estimate?

Part 2:

The attached csv files contain example data from 2016. Build a model to predict either:

1. Future cancels
2. Future claims paid out

If you choose to predict cancels, the output should be a probability of cancellation for each policy in the following month (January 2017).

If you choose to predict claims paid out, the output should be an estimated dollar amount paid out for each policy in the following month (January 2017).

It might help to transform the data to a monthly per policy basis before training.

Please include your code in the submission.