

Readme

Files are as follows:

First Problem

CapitalOneChallengeProblem1.ipynb (explanation of model building process)

output.txt (model prediction for unlabelled regression)

BuildModel.py (build model from command line using the following)

```
>> python BuildModel.py < codetest_train.txt
```

fitModel.py (predict the target values using this as follows)

```
>> fitModel.py < codetest_test.txt
```

morph_data.py (import of some helper functions)

To use all of this there are several libraries you may not have

1. py-earth (needed for Mars model)
2. xgboost (testing out xgboost model)
3. sklearn (testing out sklearn's linear regression model)

Second Problem

Babynames.ipynb (work for answering questions and exploring the data)

BabyNames.pdf (write up explaining answers and explorations)

ken.pdf, karen.pdf, linda.png — images for this writeup

To run the ipynb you must have some of these more esoteric imports

1. fuzzy (for exploratory work)
2. graphviz (for graphing the exploratory work)