

CECS 551
Assignment 1
Total: 20 Points

General Instruction

- Submit uncompressed file(s) in the Dropbox folder via BeachBoard (Not email).
 - Use **Python 3**, any other programming language is not acceptable.
 - You can import modules in the Python Standard Library (please check the full list *here*). If you want to use any other library, please consult with the instructor.
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1. (20 points) Implement regression algorithm and show the result using **scikit-learn** and **matplotlib** library.

The checking point of the assignment; Python programming skill, Jupyter notebook, **scikit-learn**, and **matplotlib**.

- i. Find **Assignment_1_linreg.ipynb** and **Assignment_1_logreg.ipynb**.
- ii. You will be asked to fill-in the blanks to generate the output. For example, in Figure 1. “# Show the list of feature names for the dataset” is the question and “list(raw.feature_names)” is the answer for the question.
- iii. Follow the instructions and fill the blanks in the **Jupyter notebooks**. Your answers should show the similar results with the outputs in the instructions.
- iv. Submit your **ipynb** files.

```
In [2]: from sklearn.datasets import fetch_california_housing
raw = fetch_california_housing()

X = raw.data
y = raw.target

# Show the list of feature names for the dataset

list(raw.feature_names)
```

```
Out[2]: ['MedInc',
         'HouseAge',
         'AveRooms',
         'AveBedrms',
         'Population',
         'AveOccup',
         'Latitude',
         'Longitude']
```

Figure 1: An example of questions