

# LinearModelRegression

This project contains four models: linear regression, ridge regression, RBF kernel regression and lasso regression.

1. All four models code is in [model.py](#)
2. Training and testing data is in [train.py](#)
3. [test.py](#) is for calculating correlation coefficient and determination coefficient
4. [data\\_preprocess.py](#) should have been used to normalize data. And since this part of code is implemented in [dataset.py](#), [data\\_preprocess.py](#) has never been used.

To see reproduce the results in the report, run the command in a linux terminal:

```
python train.py
```

In [train.py](#), training process is default off and it will always load the pretrained model in models. You can change it by setting

```
model_train = True
```

And you can change other setting to get other results.

To calculate correlation coefficient and determination coefficient of training data, run the command in a linux terminal:

```
python test.py
```

If you have any problem with the code, please feel free to contact me.