

Homework 3

Instruction(40pt):

1. Load the 'Homework3.mat', and use the two attributes of "Weight" and "Horsepower" to describe each sample. Then, train a linear regression model to predict the attribute of "Acceleration". You may see some samples whose features are NaN. You can clean these samples by removing them from training set.

2. You need to search how to load the 'Homework3.mat' if you are using Python.

2. After training, plot the samples and the plane representing the trained regression model together in one figure.

3. Upload the figure that you plot and your code (with annotation) in one file.

4. Reference

Tensorflow:

<https://colab.research.google.com/github/jakevdp/Pyth>

[onDataScienceHandbook/blob/master/notebooks/05.06-Linear-Regression.ipynb](https://github.com/DataScienceHandbook/blob/master/notebooks/05.06-Linear-Regression.ipynb)

[Pytorch:](#)

https://github.com/L1aoXingyu/pytorch-beginner/blob/master/01-Linear%20Regression/Linear_Regression.py

Matlab:

<https://www.mathworks.com/help/stats/fitlm.html>

Example:

