1. Train a linear regression model using the first 300 samples of real estate price prediction data below. Then, test the regression model on the remaining data.

https://www.kaggle.com/datasets/quantbruce/real-estate-price-prediction/versions/1?resource=download

2. Train a logistic regression model which discriminates number 1 and 2 from digits dataset(see

https://github.com/mGalarnyk/Python\_Tutorials/blob/master/Sklearn/Logistic\_Regression/LogisticRegression\_toy\_digits\_Codementor.ipynb ). Use the code below to access to the data. Show the loss function decreasing and the accuracy for test samples.

```
!pip install sklearn

from sklearn.datasets import load_digits

from sklearn.model_selection import train_test_split

digits = load_digits()

print("Image Data Shape", digits.data.shape)

print("Label Data Shape", digits.target.shape)

x_train, x_test, y_train, y_test = train_test_split(digits.data, digits.target, test_size=0.25, random_state=0)
```