5/27/23, 8:51 PM Data Analytics I

```
In [1]: import pandas as pd
        from sklearn.datasets import load_boston
        from sklearn.linear model import LinearRegression
In [2]: boston = load_boston()
        C:\Users\HP\anaconda3\lib\site-packages\sklearn\utils\deprecation.py:87: FutureWar
        ning: Function load_boston is deprecated; `load_boston` is deprecated in 1.0 and w
        ill be removed in 1.2.
            The Boston housing prices dataset has an ethical problem. You can refer to
            the documentation of this function for further details.
            The scikit-learn maintainers therefore strongly discourage the use of this
            dataset unless the purpose of the code is to study and educate about
            ethical issues in data science and machine learning.
            In this special case, you can fetch the dataset from the original
            source::
                import pandas as pd
                import numpy as np
                data_url = "http://lib.stat.cmu.edu/datasets/boston"
                raw_df = pd.read_csv(data_url, sep="\s+", skiprows=22, header=None)
                data = np.hstack([raw_df.values[::2, :], raw_df.values[1::2, :2]])
                target = raw_df.values[1::2, 2]
            Alternative datasets include the California housing dataset (i.e.
            :func:`~sklearn.datasets.fetch_california_housing`) and the Ames housing
            dataset. You can load the datasets as follows::
                from sklearn.datasets import fetch california housing
                housing = fetch california housing()
            for the California housing dataset and::
                from sklearn.datasets import fetch openml
                housing = fetch_openml(name="house_prices", as_frame=True)
            for the Ames housing dataset.
          warnings.warn(msg, category=FutureWarning)
In [3]: df = pd.DataFrame(boston.data, columns = boston.feature names)
In [4]: df['MEDV'] = boston.target
In [5]: | X = df.drop(['MEDV'], axis=1)
        y = df['MEDV']
        model = LinearRegression()
In [6]:
        model.fit(X, y)
In [7]:
        LinearRegression()
Out[7]:
        print("Intercept: ", model.intercept_)
In [8]:
        print(pd.DataFrame({'features':X.columns, 'coeficients': model.coef_}))
```

Intercept:		36.459488385089806
	features	coeficients
0	CRIM	-0.108011
1	ZN	0.046420
2	INDUS	0.020559
3	CHAS	2.686734
4	NOX	-17.766611
5	RM	3.809865
6	AGE	0.000692
7	DIS	-1.475567
8	RAD	0.306049
9	TAX	-0.012335
10	PTRATIO	-0.952747
11	В	0.009312
12	LSTAT	-0.524758

In []