

ASSIGNMENT 3

Multivariate Linear Regression

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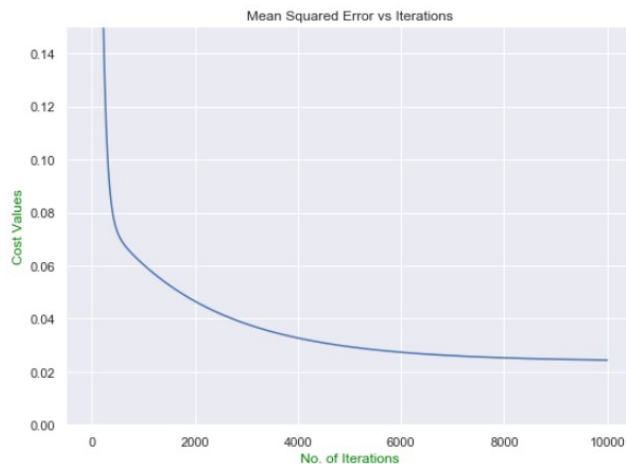
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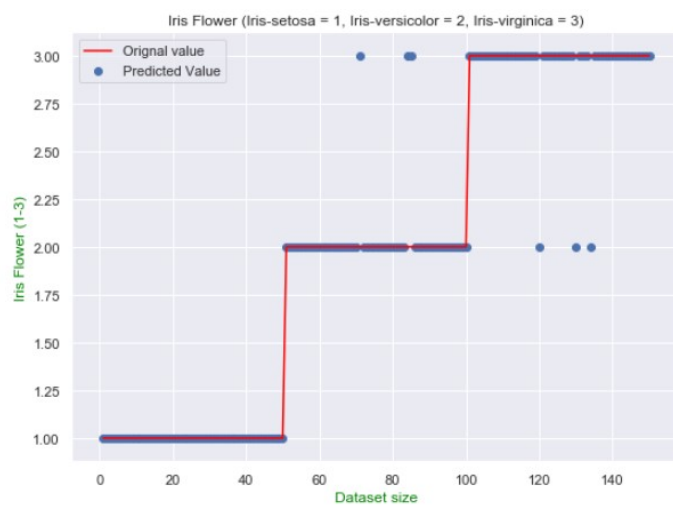
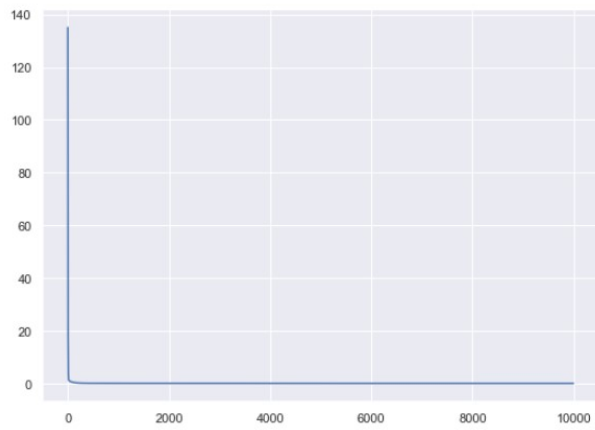
Problem Statement:

Use Multivariate linear Regression on the iris dataset to predict the classification. Also find the model accuracy.

| | Id | SepalLengthCm | SepalWidthCm | PetalLengthCm | PetalWidthCm | Species |
|---|----|---------------|--------------|---------------|--------------|-------------|
| 0 | 1 | 5.1 | 3.5 | 1.4 | 0.2 | Iris-setosa |
| 1 | 2 | 4.9 | 3.0 | 1.4 | 0.2 | Iris-setosa |
| 2 | 3 | 4.7 | 3.2 | 1.3 | 0.2 | Iris-setosa |
| 3 | 4 | 4.6 | 3.1 | 1.5 | 0.2 | Iris-setosa |
| 4 | 5 | 5.0 | 3.6 | 1.4 | 0.2 | Iris-setosa |

Theta : $\begin{bmatrix} 1.76405235 & 0.40015721 & 0.97873798 & 2.2408932 & 1.86755799 \end{bmatrix}$





The model predicted values of Iris dataset with an overall accuracy of 96.0